1 (Trial resumed;; jury present)

BRIAN BERG, resumed.

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THE COURT: Good morning, ladies and gentlemen. As always, you were extremely punctual. Basically, it's pretty disgusting. It ought to teach me a lesson, but I doubt it will. In any event, we are ready to continue. Go ahead, counsel.

MR. CABRAL: Thank you, your Honor.

- DIRECT EXAMINATION
- 10 BY MR. CABRAL:
- 11 | Q. Good morning, sir.
- 12 A. Good morning.
- 13 | Q. Yesterday, when we broke, we were about to start discussing
- 14 | what we have been calling the '703 patent in this case. I
- 15 | would like to start there. Today we are going to try to move a
- 16 | little bit faster than we did yesterday. Did you discuss at a
- 17 | high level the subject matter of the '703 patent at issue in
- 18 | this case?
- 19 A. Sure. It is a patent related to device-specific content.
- 20 || For example, a consumer appliance is able to transmit data and
- 21 | able to receive data back that related to the context of usage
- 22 | for that device.
- 23 | Q. As part of your analysis, did you compare the Nook devices
- 24 | against the claims in the '703 patent?
- 25 | A. Yes, I did.

- 1 || Q. What feature on the Nook devices was the focus of your
- 2 | analysis?

- A. The shop application.
- 4 | Q. What is the shop application?
- 5 A. The shop application is a piece of software that runs on
- 6 | all the Nook devices, and it allows the user to see lists of
- 7 | books that are available for purchase and to actually purchase
- 8 | them.
- 9 Q. What happens when a user presses the shop button on the
- 10 | menu bar of the Nook devices?
- 11 | A. What happens is a command is sent out from the device to
- 12 | the Barnes & Noble cloud.
- 13 | Q. What must the user do in order for the Nook devices to send
- 14 | out that request?
- 15 A. Simply pressing that shop button.
- 16 | Q. Does that request initiate retrieval of data?
- 17 A. Yes, it does.
- 18 | Q. Does the user need to access the shop application in order
- 19 | for the Nook devices to initiate the retrieval of data?
- 20 A. No, that's not actually necessary.
- 21  $\parallel$  Q. Why do you say that?
- 22 A. Because all you do is press the button, and the information
- 23 | is retrieved.
- 24 | Q. What happens after the Nook devices send the request to
- 25 | Barnes & Noble?

- A. What happens is the device will send both a model number and the device ID to the Barnes & Noble cloud, and the Barnes & Noble cloud will consider that information for the formatting of the information that is returned to the device so that the
- shop application is able to display, for example, lists of books for purchase.
- 7 Q. That was my next question. What type of data is actually 8 returned to the device?
- 9 A. It's data that is, for example, lists of books available
  10 for purchase and all the information that you see when the shop
  11 application comes up.
- 12 Q. How do the Nook devices know where to look for that content?
- A. There is a predetermined URL that is in the device so that
  when you hit the shop button, that URL is used to access the
  Barnes & Noble cloud.
- 17  $\parallel$  Q. What is a URL?
- 18 A. A URL basically an address on the Internet.
- 19 Q. How does that URL get into the Nook devices?
- A. When you register the devices, the way most of them work is you register the device, and then Barnes & Noble, as part of that registration process, will download a set of URLs to the device so the device knows where to go when certain functions are requested. There is one exception to that, and that is the Nook 1st Edition. The way it is actually manufactured, the

software that is in the device actually includes these predetermined URLs.

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MR. BERTA: Objection, your Honor: Scope.

THE COURT: Let me ask plaintiff's counsel, where in his report is this?

MR. CABRAL: Your Honor, I believe the objection only relates to the Nook classic, the last part of the answer.

THE COURT: I understand.

MR. CABRAL: The original opinions were based on the testimony related to all the devices in the rebuttal report.

The Nook classic was distinguished, at which point Mr. Berg addressed that at his deposition. It was in response to something specifically raised in the rebuttal report, but again only with regard to the one Nook classic edition.

THE COURT: These were questions put at his deposition by adversary counsel?

MR. CABRAL: Correct, your Honor.

THE COURT: The objection is overruled.

- Q. How does Barnes & Noble determine what content to return to the Nook devices after the shop application is selected?
- A. What happens is the Barnes & Noble cloud will have received both this model number and this device ID transmitted as a result of the user pressing the shop button. Then the Barnes & Noble cloud uses that information to decide how to format the information for display on the device. Different devices have

- 1 different formats for the size of the screens, so, as confirmed
- 2 by Barnes & Noble testimony, on a device-by-device basis the
- 3 | information will come back appropriate for each Nook device.
- 4 | Q. What identifiers did you identify, for lack of a better
- 5 | word, during your analysis?
- 6 A. Using my man-in-the-middle analysis, I identified both a
- 7 | model number as well as a device ID that's actually sent as a
- 8 result of pressing the shop button. That goes from the Nook
- 9 device to the Barnes & Noble cloud.
- 10 | Q. Did you actually see these identifiers in the man-in-the-
- 11 | middle data?
- 12 A. Yes, they were explicitly in the man-in-the-middle data.
- 13 | Q. Did you prepare any materials to help explain to the jury
- 14 | the concepts we have been discussing?
- 15 | A. Yes, I did.
- 16 Q. What did you prepare?
- 17 | A. We've got some slides.
- MR. CABRAL: Your Honor, with your permission, I would
- 19 | like to show those slides to the jury.
- 20 | THE COURT: Sure.
- 21 | Q. Mr. Berg, can you explain what is being shown on this
- 22 | slide.
- 23 | A. Sure. What we have on the screen here is the Nook HD+ just
- 24 | as an example. You can see a blow-up from the portion of the
- 25 | bottom of the screen. What you see is on the right-hand side

- there is a fifth button, and it is labeled "shop." That is the
  shop button that I have been referring to.
  - Q. For the record, the last time was PTX-223. What is being shown here at the next slide, PTX-224?

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- A. As a result of the user having pressed that shop button,
  then information is downloaded to the device from the Barnes &

  Noble cloud. That information includes lists of books for

  purchase, for example. What we see here is a blow-up of one of

  the screens showing New York Times best sellers.
- 10 Q. I am going to click through here. If you could explain to
  11 the jury what they are seeing. This is on slide PTX-226.
- A. The set of green circles represents the Wi-Fi functionality
  of the Nook. The Nook, as a result of having pressed the shop
  button, will be transmitting information from the Nook to the
  cloud. That information includes the model number and the
  device ID of this Nook device.
  - Q. What is happening here on slide PTX-227?
- A. What is happening here is information that returns from the
  Barnes & Noble cloud to the Nook device, and that information
  is tailored for whatever specific Nook device that you were
  using at that time.
- Q. I would like to direct your attention to this very large
  board here. This is claim 1 of the '703 patent. Did you form
  any opinions in this case regarding whether the Nook devices at
  issue in this case infringe claim 1 of the '703 patent?

- 1 A. Yes, I did.
- Q. What are those opinions?
- $3 \parallel A$ . My opinion is that all the devices do infringe claim 1.
- 4 Q. Did you form any opinions in this case as to whether the
- 5 Nook devices meet all of the elements of claim 1 of the '703
- 6 patent?
- 7 A. Yes, I have.
- 8 Q. What are those opinions?
- 9 A. That opinion is that indeed all of the devices meet all of
- 10 | the elements of claim 1 of the '703.
- 11 | Q. Do your opinions vary for any individual model of the
- 12 Nooks?
- 13 A. No, they do not.
- 14 | Q. Let's go through element by element, if we can. Again,
- 15 here we have a couple of elements with asterisks next to them
- 16 | indicating that the Court has defined those terms or provided
- 17 definitions for those terms. My question for you is, did you
- 18 | apply the Court's definitions when forming your opinion of the
- 19 | claim 1 of the '703 patent?
- 20 | A. Yes, I did.
- 21 | Q. Let's go through the first element here. Can you please
- 22 | explain for the jury your opinion as to why the Nook devices
- 23 are a consumer appliance.
- 24 | A. Sure. They are a consumer appliance -- you can see on the
- 25 | board here that shows the constructions. A consumer appliance

- is shown to be or defined by the Court to be a device that may send or receive information. Indeed, with all the testing I
- 3 have done as I have already been describing it, it certainly
- 4 both sends and receives data, and it is a device.
- 5 Q. Can you explain for the jury your opinion as to why the
- 6 Nook devices have an input component responsive to a user input
- 7 | for initiating retrieval of data by the consumer appliance from
- 8 a server.
- 9 A. Sure. We have been talking about in this example the shop
- 10 | button. The shop button is that input component that the user
- 11 presses.
- 12  $\parallel$  Q. In terms of initiating retrieval of data by the device,
- 13 what are you referring to there as part of your opinion?
- 14  $\parallel$  A. What happens is when the user presses that shop button,
- 15 | that request goes to the Barnes & Noble cloud, and that, of
- 16 course, includes that both model number and device ID. What
- 17 | the Barnes & Noble cloud does is it takes that request and
- 18 | initiates retrieval of data. In other words, it takes data
- 19 | from the Barnes & Noble cloud, formats it appropriately for
- 20  $\parallel$  that Nook device. That's what is performed there.
- 21 | Q. The server that is mentioned here in claim 1, what server
- 22 | are you referring to as part of your opinions?
- 23  $\parallel$  A. It is the server that's in the Barnes & Noble cloud.
- 24  $\parallel$  Q. Turning to the next element, based on a predetermined URL
- 25 | or an identifier associated with the consumer device, can you

- explain for the jury your opinion as to why the Nook devices
  meet that element.
- A. Sure. We have talked about this predetermined URL that is in the Nook device. I already explained how that happened.

  That predetermined URL is used for the information retrieval from the Barnes & Noble cloud. In other words, that URL is actually the address of the server from which data is going to

There is also the identifier here that is included in this claim element. That identifier is that model number in the device ID that I was noting. Those are associated with the consumer appliance because they are actually in the appliance and sent to the Barnes & Noble cloud. I saw in again my manin-the-middle data that indeed those are sent every time you press the shop application button.

- Q. The claim here says predetermined URL or an identifier.
- 17 Are you relying on one or both of those elements?
- 18 A. Actually both of those elements.

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be retrieved.

- Q. Turning to the next element here in claim 1, can you
  explain for the jury your opinion as to why the Nook devices
  retrieve data representing content information about the
  context of usage of a consumer appliance.
  - A. Sure. We are talking about pressing the shop button and initiating data retrieval. I was mentioning the fact that the information is tailored for each device. That information --

- 1 as I explained, the different devices have different formats,
- 2 different sizes of screens, some are LCD and some are what is
- 3 | called electronic ink screens. They have differences that need
- 4 | to be understood by the server so the information can be
- 5 displayed properly.
- 6 MR. BERTA: Objection, your Honor: Scope.
- 7 MR. CABRAL: Your Honor, to move things along, I can 8 ask him a question.
- 9 THE COURT: All right.
- 10 | Q. What specifically are you referring to regarding content
- 11 | information about the context of usage of the consumer
- 12 | appliance as it relates to your opinion?
- 13 A. The Barnes & Noble cloud, as confirmed by Barnes & Noble
- 14 | employees, for example, Mr. Mulchandani, said that information
- 15 | is prepared on a device-by-device basis. He confirmed the fact
- 16 | that indeed each --
- MR. BERTA: Same objection, your Honor.
- 18 | Q. I'll focus my question specifically on what information are
- 19 you referring to, what content information are you referring to
- 20 | as part of your opinions?
- 21  $\parallel$  A. The content information is the information that is prepared
- 22 | for display on the Nook device.
- 23  $\parallel$  Q. What is that content?
- 24 | A. That content is, for example, we are seeing on the screen
- 25 | here a list of books available for purchase, for example.

- 1 | Q. Moving to the next element here in claim 1, which, for the
- 2 | record, is a bit long. I'll read it in. "Wherein the consumer
- 3 appliance does not require a user to access a web browser or
- 4 other device in order for the consumer appliance to initiate
- 5 | the retrieval of the data." Can you please explain to the jury
- 6 your opinion as to why the Nook devices meet this element of
- 7 | claim 1.
- 8 A. Sure. I believe they meet this element because all the
- 9 user has to do is press the shop button, and that itself
- 10 | initiates the data retrieval.
- 11 | Q. Do you have an opinion as to whether the user must access a
- 12 web browser in order for the device to initiate retrieval of
- 13 | the data?
- 14 | A. Yes, I do.
- 15 | Q. What is that opinion?
- 16 A. My opinion is that they don't have to access a web browser.
- 17 | Q. Do you have an opinion as to whether the shop
- 18 | application -- before I ask that question, what is the basis of
- 19 | the opinion you just referred to?
- $20 \parallel A$ . A web browser allows you to go anyplace on the Web. But
- 21 | the shop application that comes up is very limited. It only
- 22 | allows you to see what Barnes & Noble wants you to see.
- 23  $\parallel$  Q. Do you have an opinion as to whether the shop application
- 24 | is a web browser?
- 25 | A. Yes, I do.

- 1 | Q. What is the basis for that opinion?
- 2 A. The basis for that opinion is the shop application doesn't
- 3 | allow you to go wherever you want on the Web. It only allows
- 4 | limited information to come back. So, it's not a web browser.
- 5 | Q. Must the user access a web browser in order for the device
- 6 | to initiate retrieval of the data via this shop functionality
- 7 | we have been discussing?
- 8 A. No, that's not necessary.
- 9 Q. I want to move on from claim 1, if we can. Up here on the
- 10 | board, I want to direct your attention to claims 2 and 3
- 11 | specifically of the '703 patent. Have you formed any opinions
- 12 | in this case as to whether the Nook devices at issue infringe
- 13 | claims 2 and 3 of the '703 patent?
- 14 | A. Yes, I have.
- 15 | Q. What is that opinion?
- 16 A. My opinion is that all of the devices infringe both of
- 17 | those claims.
- 18 Q. Does your opinion vary with respect to any of the Nook
- 19 devices at issue?
- 20 A. No, it does not.
- 21 | Q. Let's focus here on claim 2. There is an asterisk here
- 22 | next to "home network," which is a new term that did not appear
- 23 | in claim 1. That is a term that the Court has provided a
- 24 definition for. Did you apply the Court's definition of "home
- 25 | network" when forming your opinions?

- 1 A. Yes, I did.
- 2  $\parallel$  Q. Focusing on claim 2 here, do you have an opinion as to
- 3 | whether the Nook devices meet all of the elements of claim 2?
- 4 | A. Yes, I do.
- $5 \parallel Q$ . What is that opinion?
- A. My opinion is that indeed all of the devices, all the Nook devices, meet these elements of claim 2.
- 8 Q. Can you explain for the jury your opinion as to why the
- 9 Nook devices are configured for use on a home network.
- 10 A. Sure. When you purchase them, they have the ability to be
- 11 | able to connect to a home network. Out of the box they have
- 12 | that ability built in as part of the software that is in the
- 13 device.
- 14 | Q. Can you explain for the jury your opinion as to why the
- 15 Nook devices have Internet access functionality through the
- 16 | home network.
- 17 A. Sure. They have a Wi-Fi capability built into them.
- 18 | Q. Going to the last step of claim 2 here, can you explain to
- 19 | the jury your opinion as to why the Nook devices have a
- 20 | predetermined URL or an identifier being stored on the home
- 21 network.
- 22 A. Sure. When you have actually connected to a home network,
- 23 | it is part of that network. The predetermined URL and the
- 24 | identifier actually stored in the Nook device, since it is part
- 25  $\parallel$  of the network at that time, they are stored on the network.

- Q. When you say it is part of the home network, what are you referring to?
  - A. I'm referring to the Nook device.
- 4 Q. Turning last to claim 3 here, is it your opinion that the
- 5 Nook devices meet the elements of claim 3?
- 6 A. Yes.

- Q. Can you please explain to the jury your opinion as to why
  the Nook devices comprise a memory for storage of the URL or
- 9 the identifier.
- 10 A. Sure. There is flash memory that is in each of these
- 11 devices. That flash memory retains information, such as
- 12 | instructions and various parameters. It includes storage of
- 13 both the URL as well as the identifier. For example, if it's
- 14 powered off, you can power it on, and that URL and the
- 15 | identifiers, both the model number and the device ID, will be
- 16 used. Clearly they are stored in the device, since from a
- 17 powered-on state they are able to be accessed.
- 18 | Q. I want to move on to claim 13. I want to direct your
- 19 | attention to claim 13 here. Do you have any opinions as to
- 20 | whether Barnes & Noble infringes claim 13 of the '703 patent?
- 21 | A. Yes, I do.
- 22 | Q. What are those opinions?
- 23 | A. My opinion is that all of the Barnes & Noble Nook devices
- 24 do infringe claim 13.
- 25 || Q. Do you have an opinion as to whether Barnes & Noble

1 performs every step of claim 13?

- A. Yes. It is my opinion that they do perform the steps.
- 3 Q. You anticipated my next question. Thank you. I want to
- 4 point you to the elements of claim 13 now. Can you explain for
- 5 | the jury the basis of your opinion as to why Barnes & Noble
- 6 performs a method of enabling a service provider to provide a
- 7 service via the Internet to a user of a consumer appliance
- 8 | having a predetermined identifier.
- 9 A. Sure. We talked about this identifier being actually
- 10 stored in the device, two kinds of identifiers actually, the
- 11 | model number as well as the device ID. When the device
- 12 | operates, it is able to communicate with -- it's a consumer
- 13 | appliance, the Nook device itself is, and it has these
- 14 | identifiers. It's able to enable the service provider to
- 15 perform the service.
- In other words, by way of the Barnes & Noble cloud,
- 17 | the Nook devices are able to communicate with the cloud and
- 18 communicate the identifier, the two identifiers, and then the
- 19 service provider, which is the Barnes & Noble cloud is then
- 20 | able to respond to that.
- 21 (Continued on next page)

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- 1 Q. Can you please explain for the jury the basis for your
- 2 opinion that the identifier is stored on the home network?
- 3 A. Sure. So the identifier, as I was describing a little
- 4 | earlier, there's two kinds of identifiers in the device, both
- 5 | model number and device ID, and when it is being used, it is
- 6 part of the home network, so indeed those are part of the home
- 7 | network as well.

- O. Does the home network include the Nook devices?
- 9 A. Yes, it does.
- 10 | Q. The next step is the enabling step. Can you explain to the
- 11 | jury the basis of your opinion as to why Barnes & Noble enables
- 12 | the user by a single user input to the consumer appliance to
- 13 | have the consumer appliance initiate sending a request with the
- 14 | identifier? We will stop there.
- 15 A. Sure. Well, this is very similar to what we were
- 16 discussing with the earlier claim. Basically, a single user
- 17 | input is simply hitting the shop button on the screen of the
- 18 | Barnes & Noble Nook devices. And what that does is it sends
- 19 | the model number and the device ID from the Nook devices to the
- 20 | Barnes & Noble cloud, and then that initiates retrieval of data
- 21 | that will get downloaded for the device.
- 22 | Q. Can you explain to the jury the basis for your opinion that
- 23 | the identifier you just mentioned is representative of a type
- 24 of a consumer appliance to a server on the Internet through a
- 25 | home network?

- 1 A. Sure. So this identifier, either the model number or the
- 2 device ID, is representative of that particular Barnes & Noble
- 3 device. So it identifies that device to the Barnes & Noble
- 4 | cloud, and the device is part of the home network when it's
- 5 doing that.
- 6 Q. Can you explain to the jury your opinion as to why the
- 7 | request is sent to a server on the Internet through the home
- 8 | network?
- 9 A. Sure. I have seen from my man-in-the-middle data again
- 10 | that indeed this device ID and this model number are sent, and
- 11 | I have seen that they are sent to the Barnes & Noble server.
- 12 | Q. Turn to the last element here which reads: "Based on the
- 13 | identifier, the server initiating access to a Web page with
- 14 content information about a context of using the consumer
- 15 | appliance."
- Can you explain for the jury the basis of your opinion
- 17 | as to why Barnes & Noble performs that step?
- 18 A. Sure. Once again, we have got the two kinds of identifiers
- 19 | that are sent, and then you have got this URL that you're
- 20 | actually sending the request to. So that's the Web page. Then
- 21 | it receives the two kinds of identifiers, and then it responds
- 22 | based on the context of usage, that is, it responds knowing
- 23 | what kind of device you have got and it gives the information
- 24 | back.
- 25 MR. BERTA: Objection. Scope.

1 THE COURT: Overruled.

- Q. You can finish your answer.
- 3 A. So that information is returned back to the Nook device so
- 4 | that the shop application information, for example, the list of
- 5 | books for purchase, can be properly displayed on that
- 6 particular device.

- 7 | Q. Now, regarding your opinion as to Barnes & Noble performing
- 8 | each and every step of claim 13, does your opinion vary in any
- 9 | way depending on what model Nook is at issue?
- 10 A. No, it does not.
- 11 | Q. I will take the last claim of 703 and then move on to the
- 12 | final patent.
- The final claim I want to direct your attention to is
- 14 | claim 15, which is at the bottom of the board. Do you have an
- 15 opinion as to whether Barnes & Noble performs the step of claim
- 16 | 15 of the '703 patent?
- 17 | A. Yes, I do.
- 18 | Q. What is that opinion?
- 19 A. My opinion is all the devices do indeed perform what is
- 20 described in claim 15.
- 21 | Q. Do you have an opinion as to whether Barnes & Noble
- 22 performs the step of claim 15?
- 23 | A. Yes.
- 24  $\parallel$  Q. What is that opinion?
- 25  $\parallel$  A. My opinion is that indeed they do.

- 1 | Q. Claim 15 reads: "The method of claim 13" -- which we just
- 2 discussed -- "further comprising and creating a database of
- 3 URLs or identifiers per user."
- 4 Can you explain to the jury the basis for your opinion
- 5 as to how Barnes & Noble creates the database of URLs or
- 6 | identifiers per user?
- 7 | A. Sure. So we discussed a little earlier about how the
- 8 devices have these URLs, for example, all but the Nook 1st
- 9 | Edition have them downloaded at registration time, but the Nook
- 10 | 1st Edition has them compiled into the software. And so
- 11 | Mr. Narain has confirmed that it's actually a database of URLs
- 12 | that's maintained by the Nook devices.
- 13 | Q. Before I move on to the final patent, do you have an
- 14 | opinion as to whether Barnes & Noble infringes claim 15 of the
- 15 | '703 patent?
- 16 | A. Yes, I do.
- 17  $\parallel$  Q. What is that?
- 18 A. My opinion is that all the devices do infringe that claim.
- 19 | Q. Is it your opinion that Barnes & Noble infringes claim 15?
- 20 A. Yes, Barnes & Noble infringes claim 15.
- 21 | Q. Let's move on. The good news is this is the last claim we
- 22 | are going to talk about. The bad news is it's a bit of a
- 23 | monster.
- This is claim 96 of what we have been calling the '851
- 25 patent. Have you formed any opinions regarding claim 96 of the

- 1 | '851 patent in this case?
- 2 A. Yes, I have.
- 3 | Q. Have you compared the Nook devices at issue in this case to
- 4 claim 96 of the '851 patent?
- 5 A. Yes, I have.
- 6 | Q. Can you discuss the subject matter of the '851 patent?
- 7 A. Sure. The '851 patent basically describes a means by which 8 electronic books can be securely distributed.
- 9 Q. Did you prepare any materials to help the jury understand
- 10 the process by which electronic books are delivered to the Nook
- 11 | devices?
- 12 A. Yes, I have. I have prepared some slides.
- MR. CABRAL: Your Honor, with your permission, I would like to show those slides to the jury.
- 15 THE COURT: All right.
- 16 Q. This might be a straightforward question, but can you
- 17 explain to the jury what is being shown here on slide PDX 241?
- 18 A. This is an image of the Nook HD.
- 19 | Q. Can you explain what is shown here on slide PDX 242?
- 20 A. Sure. As I described yesterday, I did teardowns of all the
- 21 devices, took photographs, identified components on them. So
- 22 | this is a photograph of the front and back of the circuit board
- 23 | that is in the Nook HD device.
- 24  $\parallel$  Q. Can you explain what is shown here on slide PDX 240?
- $25 \parallel A$ . What this is, the receiver transmitter is the WiFi

- 1 | capability for the Nook devices. On the left it shows the area
- 2 | that we are blowing up on the right. So what is encircled is a
- 3 | WiFi chip and the WiFi antenna that are encompassed by that
- 4 blue box.
- 5 | Q. Can you explain to the jury what is shown on the next
- 6 | slide?
- 7 A. Similarly, we have got a NAND flash chip, which is used for
- 8 storage of electronic books and instructions; a DRAM, or
- 9 dynamic random-access memory chip. And also illustrated is a
- 10 | micro SD memory card. This is not actually sold with the Nook
- 11 devices, but all but the GlowLight include a slot for insertion
- 12 of a micro SD card. So these are the memory components within
- 13 | the Nook devices.
- 14  $\parallel$  Q. Can you explain to the jury what is shown on the next
- 15 | slide?
- 16 A. Sure. So I show here a processor. The reason it's only
- 17 shown as half of that chip there is because the chip includes
- 18 both a dynamic RAM as well as the processor in the one package.
- 19 | So just to graphically show it, I showed half of it.
- 20  $\parallel$  Q. Just for the record, this is slide PDX 239, is that
- 21 | correct?
- 22 | A. That's correct.
- 23 | Q. Can you explain to the jury what is shown here on slide PDX
- 24 | 243?
- 25  $\parallel$  A. So what we have got is the original circuit board grayed

- 1 | out. Then what had been encircled in the blue box is now shown
- 2 | just as an outline to represent that receiver transmitter for
- 3 | the WiFi capability. Then connected to that is a line and
- 4 | shown connected to that is a transmission tower. That is just
- 5 | representative of the antenna just for the sake of this
- 6 animation.
- 7  $\mathbb{Q}$ . Can you explain for the jury what is happening here on
- 8 | slide PDX 244?
- 9 A. Sure. So what we have is where the micro SD memory card
- 10 | slot was is moved into the memory area just to show that what
- 11 | is being shown on the left here is the memory that's within the
- 12 device, which was both the flash as well as the DRAM chips.
- 13 | Q. Can you explain what is shown here on slide PDX 245?
- 14 A. What we have here is the processor. If you notice also,
- 15 | the lines interconnecting these, that shows that all of these
- 16 devices are coupled to each other because they are electrically
- 17 | interconnected on the circuit board.
- 18 | Q. Can you explain what is shown here on slide PDX 246?
- 19 A. Just for the sake of convenience of what we have got here,
- 20  $\parallel$  we are just blowing up those boxes.
- 21 | Q. Can you explain what is shown here as part of this
- 22 | animation on the same slide?
- 23 | A. Sure. This is representative of a WiFi communication
- 24 | between the Nook device and the Barnes & Noble cloud.
- 25  $\parallel$  Q. What is happening now?

- 1 A. Now it's receipt of information back from the Barnes &
- 2 Noble cloud to the Nook.
- Q. Can you explain for the jury what is happening in this part of the animation?
- 5 A. So we have these letters EAN. That stands for European
- 6 article number. It's now a term that is known internationally
- 7 | as an international article number. It's a 13 digit number
- 8 | that corresponds, for example, with the Barnes & Noble system
- 9 to electronic books that are available for purchase from Barnes
- 10 & Noble.
- 11 | Q. How are the EANs, how do they correspond to -- what do they
- 12 | correspond to?
- 13 A. Well, if you remember from the earlier picture that we saw
- 14 | in the shop application, we saw, for example, the New York
- 15 Times bestseller list, that would be a list of books. So you
- 16 can think of the EANs as a way that the Nook device actually
- 17 | works with those different books that are available for sale in
- 18 | that list of books. So each one of these EANs represents a
- 19 book in that list.
- 20  $\parallel$  Q. Can you explain for the jury what is happening here on
- 21 | slide PDX 249?
- 22 A. So what has happened here is if you're using the book, and
- 23 | if you have chosen one of the books for purchase, then what the
- 24 | Nook device does is it will select one of those EANs from that
- 25 | list and then transmit that EAN to the Barnes & Noble cloud.

1 MR. BERTA: Objection, your Honor. Foundation.

THE COURT: How do you know that?

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THE WITNESS: I know that because I have looked at the man-in-the-middle data that shows the EANs being received and transmitted. I have also then set up log files that have received those.

THE COURT: Overruled.

- Q. Turning to the next slide here, can you explain to the jury what is shown here on slide PDX 250?
- A. Sure. If you remember from the previous thing that happened, the EAN that was selected is sent to the Barnes & Noble cloud. As a result, the Barnes & Noble cloud will generate a book license for that book that's being purchased.
- 14 | Q. Again, how do you know that?
  - A. I know that because I have seen the source code related to that. I have also had the man-in-the-middle analysis that shows the license being received from the cloud. So it's generated in the cloud and is sent back to the Nook device.
  - Q. Can you explain to the jury what is happening now as part of this animation?
- A. Sure. So we have got that book license that was generated in the cloud being sent back to the Barnes & Noble Nook and being stored in the memory of the Nook.
- 24 | Q. What is shown here on slide PDX 251?
- 25 A. So what was shown here is that book license that's been

- 1 | received, it includes various kinds of information, including
- 2 encryption information. One of the pieces, for example, of
- 3 encryption information is the type of encryption that's been
- 4 done for the electronic book. In this case, that encryption is
- 5 | called passHash.
- 6 Q. What is happening here on slide PDX 251?
- 7 A. What is happening here is a pre-master secret is being
- 8 generated. That's a number that is being generated on the Nook
- 9 device.
- 10 | Q. What is a pre-master secret?
- 11 | A. A pre-master secret is a parameter that is generated as a
- 12 part of the process of setting up a secure connection between
- 13 | the Nook device and the cloud. So when data is sent in an
- 14 | encrypted format, it's sent over what you can call a secure
- 15 connection. In order to have that secure connection, you have
- 16 | to encrypt or scramble the information. So the basis of being
- 17 | able to perform that scrambling starts with creation of this
- 18 | number that is called a pre-master secret.
- 19 Q. Can you explain to the jury what is happening as part of
- 20 | this animation on slide PDX 252?
- 21 A. So this pre-master secret that we have generated, this is
- 22 | the process that is setting up this secure connection. What
- 23 | you have to do is you have to securely send that pre-master
- 24 secret to the cloud so that you can both start with the same
- 25 | number.

- 1 | Q. What is happening here on slide PDX 253?
- 2 A. What is happening here is we have got a process of taking
- 3 | the pre-master secret and turning it into an encryption key and
- 4 | a decryption key. In this case, notice that we have switched
- 5 | over from the Barnes & Noble cloud to the content provider.
- 6 | There's two types of clouds that are communicated with by the
- 7 Nook. So this is the creation of the keys that will be used
- 8 | for the connection to the content provider.
- 9 Q. What is being shown here on slide 255?
- 10 A. What is being shown here is the content provider actually
- 11 | has the electronic book. This is being depicted as this little
- 12 | box with a lock on it. Now, when the book is created
- 13 | initially, it's created and stored in an encrypted fashion. So
- 14 | this little lock that's attached to this book gives an
- 15 | indication that it's locked and requires a key to unlock it, in
- 16 other words, to unscramble the data.
- 17 | Q. What is shown here, why is there a second lock on the book?
- 18 A. There is a second lock here because we have generated
- 19 previously this encryption and decryption key, and so that
- 20 | allows for a second lock to be placed on the book. So the book
- 21 | is initially encrypted when it's created, and then it's
- 22 encrypted again for the secure connection between the content
- 23  $\parallel$  provider and the Nook device.
- 24 | Q. Can you explain what is happening here on this final slide
- 25 | 256?

- 1 A. Sure. So what we have got here, you saw a key coming from
- 2 the bottom to unlock the lock on the right, and that's
- 3 | unlocking from the secure transmission. Then a lock came from
- 4 passHash to unlock the actual electronic book itself. So both
- 5 locks have been unlocked. And as a result of that, you are
- 6 actually able to view the electronic book. So that is what is
- 7 | represented on this screen.
- 8 | Q. The final part of the presentation, or the final part of
- 9 | your testimony, is I just want to introduce one document
- 10 | quickly, and then we are going to run through the elements and
- 11 | we are done.
- 12 | I want to direct your attention to a document in your
- 13 | binder from yesterday. It's Joint Exhibit 18. Do you have
- 14 | that in front of you?
- 15 | A. Yes, I do.
- 16 | Q. Do you recognize this document?
- 17 | A. Yes, I do.
- 18  $\parallel$  Q. Did you rely on this document when forming your opinions in
- 19 | this case?
- 20 | A. Yes, I did.
- 21 MR. CABRAL: Your Honor, plaintiff moves to enter
- 22 | Joint Exhibit 18 in evidence.
- 23 || THE COURT: As previously indicated, all joint
- 24 exhibits are automatically received. So Exhibit 18 is
- 25 | received.

1 (Joint Exhibit 18 received in evidence)

- 2 | Q. Can you tell the jury what Joint Exhibit 18 is?
- 3 A. It is titled, "The TLS protocol." And TLS stands for
- 4 | transport layer security. So this is the protocol that allows
- 5 for that secured connection, for example, between the Barnes &
- 6 Noble cloud and the Nook or the content provider and the Nook,
- 7 | to be created.
- 8 | Q. I want to direct your attention here to claim 96. OK?
- 9 A. OK.
- 10 | Q. We are almost done.
- Do you have an opinion as to whether the Nook devices
- 12 | infringe claim 96?
- 13 | A. Yes, I do.
- 14 | Q. What is that opinion?
- 15 A. My opinion is that all of the Nook devices infringe claim
- 16 | 96.
- 17 | Q. Do you have an opinion as to whether the Nook devices meet
- 18 | each element of claim 96?
- 19 | A. Yes, I do.
- 20 | Q. What is that opinion?
- 21 A. My opinion is that all of the Nook devices meet all the
- 22 | claim elements of claim 96.
- 23 | Q. Now, let's start with the first element -- the first part
- 24 of claim 96 I should say. "An electronic book viewer for
- 25 | receiving an electronic book from a sending party and for

1 storing and displaying the electronic book."

Can you explain for the jury your opinion as to why the Nook devices meet that element?

- A. So we have got the Nook devices able to view electronic books. We have been discussing that here. I have verified that with all of the devices. So they are able to receive those electronic books from the sending party. The sending party in this case is the Barnes & Noble cloud.
- I think that answers your question. Should I go on with the rest of that?
- Q. What is the basis of your opinion?

step D refers to a transmitter?

- A. The basis of my opinion is that the testing I have done has confirmed that, and I have seen evidence of that also with the man-in-the-middle analysis that I did.
  - Q. I want to direct your attention, I am going to try to hit four main topics here. You see here step A refers to receiver, step B refers to the memory, step C refers to a processor, and
- 19 | A. Yes.

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- Q. Can you explain for the jury your opinion as to why the
  Nook devices have those four component parts?
- A. Sure. If you remember from the slides we were looking at a little bit earlier, we actually saw all of those being
- 24 | illustrated from my teardown photographs. The receiver, number
- 25 A, and transmitter, number D, are actually one component

- 1 | really. So receiver transmitter with an antenna for the WiFi
- 2 capability. Then we have also got the memory in the upper
- 3 | right there, and that's the flash memory and the DRAM that is
- 4 | in all of the devices. Then we have the processor, which is
- 5 | the system on chip that is also in each of the devices. And
- 6 | that's the processor.
- 7 | Q. Can you explain for the jury the basis for your opinion
- 8 | that the Nook devices receive a created transmitted list of
- 9 | titles for available electronic books?
- 10 A. Yes. I have seen with my man-in-the-middle analysis that
- 11 | upon hitting the shop button, a list of books are received. So
- 12 | these lists are received, plus you see the evidence of that on
- 13 | the screen itself.
- 14  $\parallel$  Q. Now, the title has an asterisk next to it. That is a term
- 15 | that's been defined by the Court, as well as electronic book
- 16 | also in this claim. Did you apply the Court's definitions when
- 17 | forming your opinions in this case?
- 18 | A. Yes, I did.
- 19 | Q. Can you explain for the jury the basis of your opinion as
- 20 | to why the electronic book previously mentioned, its text
- 21 | associated with the electronic book is available for
- 22 | transmission?
- 23 | A. Sure. Basically, that is simply saying that the electronic
- 24 | book itself is available, in other words, the shop application
- 25 | shows books available, and there are books available for

- 1 purchase and download as a result of that.
- 2 | Q. Can you explain for the jury the basis for your opinion as
- 3 | to why the Nook devices or how the Nook devices select a title
- 4 | from the transmitter?
- 5 A. We talked about the titles being those EAN, those 13-digit
- 6 | numbers. So what happens is a list of these EANs is received
- 7 | by the Nook device, and I verified that with my
- 8 | man-in-the-middle analysis. And then when the user chooses the
- 9 | book, then one of those EANs corresponding to that book ends up
- 10 | being selected by the software in the Nook device.
- 11 MR. BERTA: Objection. No foundation again, your
- 12 | Honor.
- 13 THE COURT: Overruled.
- 14 | Q. What is the basis for your opinion that the Nook devices
- 15 communicate in this select a title?
- 16 | A. I have seen, once again with the man-in-the-middle
- 17 | analysis, that the EAN associated with the book that I have
- 18 selected on the screen for each of the devices is actually then
- 19 | transmitted to the Barnes & Noble cloud.
- 20  $\parallel$  Q. Then can you explain to the jury the basis for your opinion
- 21 as to why the Nook devices receive transmitted text associated
- 22 | with the select a title as encrypted electronic books and
- 23 | encryption information?
- 24  $\parallel$  A. Sure. So what happens is when you purchase the book, you
- 25  $\parallel$  receive the encrypted electronic book back. So I have seen

that traffic with my man-in-the-middle analysis, and it's certainly been able to display the book after receiving it.

With regard to the receiving encrypted information, that's part of that license that gets received also that I showed in my animation. So that describes the kind of encryption that's done on the electronic book.

Q. We are halfway done with this claim. I just have one question about --

THE COURT: Well, you may be halfway done with this claim, but you are exactly six minutes before the conclusion of your direct.

MR. CABRAL: Thank you, your Honor.

Q. I wanted to ask you one quick question about the word title as it appears in this claim.

The Court's definition of title, did you apply that definition in forming your opinions in this case?

A. Yes, I did.

- 18 | Q. Is that title the title of a book or something else?
- 19 A. It's the 13-digit EAN that's associated with the electronic 20 book.
  - Q. I want to move on to the final three steps of claim 96.

Can you explain for the jury the basis for your opinion as to why the Nook devices have a memory coupled to the receiver that stores the encrypted electronic books and the encryption information?

- 1 A. Sure. So there is this memory that is both a flash memory
- 2 | and random-access memory, and that's coupled to the receiver,
- 3 and they are able to store the book for later viewing.
- $4 \parallel Q$ . Can you explain to the jury the basis for your opinion as
- 5 | to why the Nook devices include a processor coupled to the
- 6 memory that processes the encryption information using an
- 7 | encryption/decryption algorithm?
- 8 A. Sure. So, once again, the system on chip that is running
- 9 | and it's performing the step of actually decrypting the book,
- 10 and then the book is able to be displayed to the user as a
- 11 | result of that.
- 12 | Q. Can you explain to the jury the basis for your opinion as
- 13 | to why the processor on the Nook devices includes a key
- 14 generator that generates encryption and decryption keys?
- 15 A. This key generator is the key generator that is used to
- 16 generate the TLS or secure connection between the Nook device
- 17 | and the content provider.
- 18 | Q. On the last step of claim 96, can you explain for the jury
- 19 | the basis of your opinion as to why the Nook devices include a
- 20 | transmitter coupled to the processor that sends encryption
- 21 | information to the sending party?
- 22 A. So there is this transmitter that is part of the WiFi and
- 23 | the encryption information that is sent is this pre-master
- 24 | secret that allows for the secure connection between the Barnes
- 25 & Noble cloud and the Nook device.

- 1 | Q. The final step here, I am going to read it for the record.
- 2 | "Wherein the encryption information includes information that
- 3 | allows encryption and decryption of the electronic book and
- 4 encryption and decryption of the encryption and decryption
- 5 keys."
- 6 Can you explain to the jury your opinion that the Nook
- 7 devices meet that element?
- 8 A. Sure. So the secure connection that's been set up between
- 9 the Barnes & Noble cloud and the device has the ability to be
- 10 able to download an electronic book over that connection. In
- 11 | addition, the latter part of that, with regard to the
- 12 | encryption and decryption of electronic keys, when the license
- 13 | is received, that actually includes the key that is used to
- 14 decrypt the book. So that is both an encryption key and a
- 15 decryption key. So that same key can be used for that
- 16 decryption. And when it's transmitted over the secure
- 17 connection, it is actually encrypted and then decrypted.
- 18 Q. The final two questions for you, if that's OK.
- Do your opinions regarding claim 96 vary according to
- 20 | what Nook device is at issue?
- 21  $\parallel$  A. No, they do not.
- 22 | Q. Is it your opinion that all the Nook devices at issue in
- 23 | this case are infringed by claim 96?
- 24 | A. Yes, it is.
- 25 | Q. My final question, in case I may have missed it, is when we

- were talking about this step B here, the memory coupled to the receiver that stores encrypted electronic books and the
- 3 encryption information, do you see that?
- 4 | A. Yes.

- 5 Q. Does the memory of the Nook devices also store encryption
- 6 | information?
- 7 A. Yes, it does.
  - Q. What encryption information is that?
- 9 A. That encryption information is the encryption information
- 10 | that's included in the license, and so that license is stored
- 11 | within the memory of the Nook device.
- 12 | Q. My final question is, how do you know that?
- 13 A. I know that because there's deposition testimony that
- 14 | supports that, and also by virtue of the fact that the way the
- 15 decryption of the electronic book works it requires a key, and
- 16 | so I have seen the transmission of the key within the license
- 17 | in my man-in-the-middle analysis. That ends up getting stored
- 18 and then used later. So, for example, I can power the device
- 19 off and back on and still access the book. So it must be
- 20 stored in the device.
- 21 MR. CABRAL: Thank you, your Honor. No further
- 22 | questions.
- 23 | THE COURT: Ladies and gentlemen, we are going to give
- 24 | you a ten-minute break at this point, short mid-morning break,
- 25 | and then we will go to 1:00. But I think this is the right

- 20
- 22 I would like to start a little bit with your background.
- 23 Α. Sure.
- 24 You obviously were retained by ADREA for purposes of this
- 25 litigation, is that correct?

- 1 A. That's correct.
- 2  $\parallel$  Q. And it's correct that this work that you do of providing
- 3 services for litigation, that's about 70 percent of your work,
- 4 | is that correct?
- 5 A. That's about right, that's correct.
- 6 Q. For this case, for ADREA, you and the people who helped you
- 7 | in your work, at least as of January 2014, is it correct that
- 8 | you charged about \$400,000 for your work in this case, is that
- 9 | about right?
- 10 A. That's approximately correct. So half of that myself and
- 11 | half for the people who were under my direction.
- 12 | Q. You and your people. So that was in January 2014?
- 13 A. Correct.
- 14  $\parallel$  Q. Half a million by now, is that right?
- 15 A. Maybe something like 250 for myself. So something like 450
- 16 | total, to the best of my knowledge, something like that.
- 17 | Q. You have done work for ADREA before, is that correct?
- 18 A. I was engaged by Discovery Systems before.
- 19 | Q. So you have done work for Discovery and you have done work
- 20 | for ADREA, is that true?
- 21 A. It became ADREA during that previous case.
- 22 | Q. And you have also done work for Sony, is that right?
- 23 | A. That's correct.
- $24 \parallel Q$ . Now, you testified I think on direct something about how
- 25 | you did consulting and analysis with respect to the Amazon

- 2 A. That's correct.
- 3 | Q. And that that was your prior experience with e-readers?
- 4 | A. That's correct.
- 5 | Q. It's correct that all of that experience was actually for
- 6 | the purpose of being one of their hired experts for the Amazon
- 7 | litigation, is that right?
- 8 | A. Well, I was hired to perform analysis as an expert in that
- 9 case, and I had background that was appropriate for that work.
- 10 | Q. So you were hired for the litigation, right?
- 11 | A. That's correct.
- 12 | Q. For the litigation is how you gained your experience with
- 13 | e-readers?
- 14 A. My direct hands-on experience, that's correct.
- 15 | Q. By the way, Sony is a part owner of ADREA, is that right?
- 16 A. That's my understanding, yes.
- 17 | Q. Now, this case is directed to various Nook devices,
- 18 | correct?
- 19 A. That's correct.
- 20 | Q. Nook hardware?
- 21 A. Right. The Nook devices as well as the Barnes & Noble
- 22 | cloud and infrastructure that supports it.
- 23  $\parallel$  Q. The Nook device is a piece of hardware, is that correct?
- 24 | A. It is a piece of hardware, that's correct.
- 25 | (Continued on next page)

- 1 | Q. It is also correct that the last time the court refused to
- 2 | allow you to opine as an expert in a litigation, there was a
- 3 dispute with regard to the hardware design aspect of what was
- 4 | being opined on? Is that correct?
- 5 A. There was a previous dispute about that, yes.
- 6 Q. With respect to the hardware design aspects, your testimony
- 7 | was not accepted previously, is that correct?
- 8 A. Right. I offered --
- 9 Q. The question is, correct or not correct?
- 10 A. The hardware portion of it, that's correct.
- 11 | Q. Because the court decided that it didn't match up with your
- 12 | background, correct?
- 13 | A. It was based on a question that I had answered during the
- 14 deposition that was misleading. I provided an incomplete
- 15 answer.
- MR. BERTA: Your Honor, Berg 18:17 to 21. I am giving
- 17 | you right now a copy of the transcript, if appropriate.
- 18 THE COURT: Go ahead.
- 19 MR. BERTA: Thank you, your Honor.
- 20 | Q. "Q. OK. And --
- 21 THE COURT: I'm sorry.
- 22 MR. BERTA: I'm sorry. I thought I gave you the cite.
- 23 | Page 18, lines 17 to 21.
- 24 THE COURT: Any objection?
- 25 MR. CABRAL: No objection, your Honor.

1 THE COURT: Go ahead.

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- 2 "Q. OK. And why was it not accepted, based on your best understanding?
  - "A. Based, based on my best understanding, the court decided it didn't match with, with my background."

Since that time that you were excluded, other than the other case where you were working with ADREA, you have never otherwise been hired by anyone for an engagement related to ereaders and ebooks, correct?

- 10 A. Since my previous engagement, that's correct.
  - Q. Other than working with ADREA or Discovery I guess in the same case, you have also not had any other engagements in your career specifically directed to encryption of electronic books,
- 15 A. With regard to encryption of electronic books, that is 16 correct, yes.
- Q. In your other case for ADREA, you actually didn't ever testify in court, is that right?
- 19 A. That's correct.

isn't that correct?

- Q. You were hired by ADREA or Discovery to provide opinions in that other case in November 2010, is that right?
- 22 A. I believe that's a correct date, yes.
- Q. Prior to November 2010, you had no experience in a professional capacity with ebooks or ereaders, isn't that correct?

- 1 A. I believe that's correct, yes.
- 2 | Q. To your recollection, you have never done any industry
- 3 consulting directed to ebook technology, correct?
- 4 A. I believe that's correct.
- 5 Q. You have no industry consulting experience directed to
- 6 | technologies for turning consumer appliances into topical
- 7 | servers, correct?
- 8 MR. CABRAL: Objection, your Honor: Foundation.
- 9 THE COURT: Overruled.
- 10  $\parallel$  A. Could you repeat the question.
- 11 | Q. Yes. You have no industry consulting experience directed
- 12 | to technologies for turning consumer appliances into topical
- 13 servers, correct?
- 14 | A. I believe that's correct.
- 15 | Q. To be clear, you are not providing any opinions and haven't
- 16 provided any opinions relating to the validity of any of the
- 17 | patents at issue, is that right?
- 18 A. That's correct.
- 19 Q. In fact, is it true that you recall that maybe 20 years ago
- 20 | the capabilities of encryption and distribution of content
- 21 | already existed in a portable device, is that right?
- 22 A. I'm not quite sure I understand your question.
- 23 | Q. OK.
- 24 | A. You're referring to technology that existed 20 years ago?
- 25 | Q. Yes.

- 1 A. Right. Specifically, you are referring to which
- 2 | technology?
- 3  $\parallel$  Q. Let me ask the question again.
- 4 | A. Sure.
- 5 Q. In fact, you recall maybe 20 years ago that the
- 6 | capabilities of encryption and distribution of content already
- 7 | existed on a portable device, isn't that correct?
- 8 A. I believe that's probably correct. Frankly, I haven't
- 9 | really thought about that question too directly.
- 10 Q. 20 years ago would be about 1994, right?
- 11 A. Right.
- 12 | Q. I want to cover the '703 patent first, which I think is a
- 13 | little out of order. The '703 patent is what some people call
- 14 | the topical server patent and other people call the garbage can
- 15 patent, right?
- 16 | A. OK.
- 17 | Q. I assume we agree that Nooks are not a garbage can, fair?
- 18 A. I think that's pretty fair.
- 19 | Q. But you and I agree that the Nook is basically a computer,
- 20 correct?
- 21 A. Of course, to answer that question best, computers are so
- 22 prevalent these days. Indeed, it is like an embedded computer.
- 23 | It's like a small computer, in effect.
- 24 MR. BERTA: Your Honor, 61:14 to 19.
- 25 MR. CABRAL: Your Honor, we don't view this as actual

1 impeachment.

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THE COURT: The objection stated at line 16, which is preserved, is now sustained. You cannot read that question and answer.

MR. BERTA: Thank you, your Honor.

- Q. You do agree that at least some of the Nooks that you opined about indisputably have web browser functionality, correct?
- 9 I do agree that some of them do have a separate web browser 10 that can be invoked.
- 11 Q. Separate, nonseparate, that is kind of the issue here. You definitely agree that the Nook devices have web browser 12 13 functionality, true?
- 14 A. Most of them do.
  - You agree that just because one thing on the Nook is a browser, that fact in and of itself does not mean that something else on the Nook couldn't also be a browser, right?
- 18 A. I would think that when you say that, that would imply that there would be two browsers on the Web -- or on the device,
- 20 excuse me. I think that is effectively what you are asking me.
- 21 Is that right? I want to answer your question correctly, but
- 22 the way it was stated --
- 2.3 Q. I'll ask it again, if that will help. Do you agree that 24 just because one thing on the Nook is a browser -- and you say

- 1 A. That's correct.
- 2 Q. Just because there is one thing on the Nook that is a
- 3 | browser, you agree that that fact in and of itself does not
- 4 | mean that something else on the Nook couldn't also be a
- 5 | browser, right?
- 6 A. That doesn't mean there couldn't be a second browser.
- 7 | Q. That's all I'm asking. The issue is whether also the shop
- 8 | is a browser, right?
- 9 A. That's certainly one of the points that is being discussed
- 10 here, yes.
- 11 | Q. You did this man-in-the-middle analysis on some of the
- 12 Nooks, is that right?
- 13 A. That's correct.
- 14 | Q. I think you stated yesterday that you relied on the results
- 15 of your man-in-the-middle analysis to support your conclusions
- 16 | in this case, is that correct?
- 17 | A. To support at least some of the conclusions, that's
- 18 | correct.
- 19 | Q. That works by you inserting a computer, your computer, in
- 20 | the middle of otherwise secure encrypted communications between
- 21 | the Nook and the Barnes & Noble servers, right; that's why you
- 22 | said you did it?
- 23 | A. That's correct.
- 24  $\parallel$  Q. That happens to also be a technique used by hackers, fair?
- 25 | A. Hackers do that. Developers do that, too. It's an

- 1 | important part of developing software like this.
  - Q. Hacking it?

- 3 A. No, actually developing software. When you develop a
- 4 | system like this that communicates with the Internet, it gets
- 5 | quite complex. The tool I used is actually used by many
- 6 developers for developing web applications. I don't have any
- 7 | knowledge, for example, of Barnes & Noble using this tool that
- 8 | I use called Charles, but it wouldn't surprise me, because it
- 9 is a popular tool and it is important for developing these
- 10 products.
- 11 | Q. Speaking of Barnes & Noble, you didn't tell anyone at
- 12 | Barnes & Noble and you didn't tell anyone at Barnes & Noble's
- 13 | counsel and you didn't have your counsel tell anyone at Barnes
- 14 & Noble that you were going to hack into the secure
- 15 communications between the servers and the devices, correct?
- MR. CABRAL: Objection, your Honor.
- 17 | THE COURT: Ground?
- 18 MR. CABRAL: Argumentative.
- 19 THE COURT: This is cross-examination. Overruled.
- 20 | Q. True?
- 21 A. You're calling it hacking. Indeed, it is acting as an
- 22 | intermediary. It can be used as a debug tool. Indeed,
- 23 | somebody could hack as well. It is the sort of thing that
- 24 people hear the term "hacking," and it is obviously --
- 25 | Q. Mr. Berg, you did not use it as a debug tool, correct? You

- 1 used it to spy on and interpret the encrypted communications,
- 2 | fair?
- 3 A. Yes, that's what I did.
- 4 | Q. Regardless, a man-in-the-middle attack only actually tells
- 5 you when information is sent back and forth between the device
- 6 and the server, correct?
- 7 A. Right, it tells that, yes.
- 8 | Q. It is not as if by only knowing that information you can
- 9 know definitively one way or the other what the device is doing
- 10 | with that information or the server is doing with that
- 11 | information, true, based on a man-in-the-middle attack?
- 12 A. It depends on what is being done with it. It certainly was
- 13 part of my analysis. It wasn't the sole thing, but I used it
- 14 | along with other components. Just so it isn't characterized as
- 15 | the only tool I used.
- 16 | Q. I don't believe the question characterized it as the only
- 17 | tool. Right? Let me ask it again. Based on a man-in-the-
- 18 | middle attack, you cannot tell, based on the information that
- 19 | is being passed between the computer, Nook, and the server,
- 20 | what the server is using with respect to that information and
- 21 what the device is using with respect to that information or
- 22 whether they are using it at all, correct?
- 23 | A. That's correct.
- 24 | Q. In any event, it is also true, I believe you mentioned,
- 25 | that you only did this man-in-the-middle attack -- in any

- 1 | event, you only did this man-in-the-middle analysis with
- 2 | respect to the Nook HD and the Nook HD+, correct?
- 3 | A. That's correct.
- 4 | Q. You didn't do it with any of the other Nook devices,
- 5 | correct?
- 6 A. That's correct.
- 7 Q. There is no man-in-the-middle analysis for the Nook
- 8 | classic, the Nook Color, the Nook Tablet, the Nook Simple
- 9 | Touch, the Nook Simple Touch with Glowlight, or the Nook
- 10 | Glowlight, correct?
- 11 | THE COURT: Asked and answered. Sustained.
- MR. BERTA: Compound.
- 13 | THE COURT: It is compound, good point. I said asked
- 14 | and answered. That one really was argumentative in a way that
- 15 cross-examination, even cross-examination, should not permit.
- 16 You get the idea.
- MR. BERTA: Yes, your Honor.
- 18 THE COURT: Very good.
- 19 | Q. I think you mentioned also yesterday that you only
- 20 | performed a man-in-the-middle analysis on the HD and the HD+
- 21 | because it would have been more expensive to perform the
- 22 | analysis for more Nook devices, correct?
- 23 | A. That wasn't the only reason.
- 24 | Q. You mentioned expense, correct?
- 25  $\parallel$  A. That was part of it, yes.

- Q. Expensive means you would have charged ADREA more money, correct?
  - A. It would have taken more hours, so yes, that's correct.
  - Q. Who decided not to invest money in a man-in-the-middle analysis with respect to all of the other devices that ADREA is seeking damages and a finding of infringement for?
- 7 MR. CABRAL: Objection, your Honor.
- 8 THE COURT: Sustained.
  - Q. One thing that you discovered in the man-in-the-middle analysis -- let me start that over. Back to the '703, which is where we started, just so you know where I am.
- 12 | A. Sure.

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- Q. One thing you discovered with the Nook with the man-in-themiddle analysis is that what the Nook receives in shop is HTML
- 15 code in response to pressing the shop application button, is
- 16 | that correct?
- 17 A. That's part of it, yes.
- 18 Q. You are aware that HTML is a format used for web pages,
- 19 | correct?
- 20 | A. That's correct.
- 21 | Q. HTML can be rendered by web browsers, correct?
- 22 | A. That's also true, yes.
- 23 | Q. Another thing that you discovered was that the Nook HD or
- 24 | HD+ is passing information to the Barnes & Noble cloud during
- 25 | the shop interaction, is that right?

- 1 A. That's correct.
- 2 | Q. Is it correct that you used this Charles proxy, I think you
- 3 | mentioned yesterday, to print out some of the communications
- 4 | that were going on between the HDs and the cloud, is that
- 5 | right?
- 6 A. That's correct.
- 7 MR. BERTA: May I approach, your Honor? Thank you.
- 8  $\parallel$  Q. I have handed you what we will mark as PTX-076-B.
- 9 THE COURT: Give it to me again.
- 10 MR. BERTA: 076-B.
- 11 THE COURT: OK.
- 12 | Q. Exhibit 076 is a plaintiff's exhibit. It is the
- 13 | information that you provided with respect to your Charles
- 14 proxy debugging proxy application. Do you recognize PTX-076-B
- 15 | as a printout of some of the information that you had with
- 16 | respect to your Charles proxy debugging proxy application.
- 17 A. It certainly appears to be that way, yes.
- 18 | Q. This is a communication between shop and the Barnes & Noble
- 19 | cloud, is that correct?
- $20 \parallel A$ . That is correct. There is multiple addresses on the cloud
- 21 | that are used, and this is one of them, that's correct.
- 22 | Q. This particular communication in 076-B, that happened
- 23 | immediately after the shop app sent its initial GPB command to
- 24 | the server for the shop application, is that right?
- 25 | A. From this context I can't say definitively, but that is

1 | certainly believable, yes.

2 MR. BERTA: Your Honor, I move for admission of 076-B:

I would move to admit PTX-076-B.

THE COURT: Any objection?

MR. CABRAL: No, your Honor.

THE COURT: Received.

(Plaintiff's Exhibit 076-B received in evidence)

- Q. This is in the smallest type ever. It is correct that there is a user-agent field here in this communication from the
- 10 Nook device during shop to the browser, correct? I'm sorry.
- 11 | To the cloud, correct?
- 12 A. I didn't hear the first couple of words.
- 13 | Q. It is correct there is a user-agent field reflected in this
- 14 communication between the shop application and the cloud,
- 15 | correct?

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- 16 A. That's correct, yes.
- 17 | Q. If you see there in the user-agent field, according to you,
- 18 | it's correct that the official standards document for HTTP says
- 19 | that this user-agent field contains information about the user-
- 20 agent originating the request, is that correct?
- 21 | A. I believe that's a correct statement.
- 22 | Q. In the user-agent field, do you see there there is
- 23 reference to a bunch of things? True, correct?
- 24 | A. Yes.
- 25  $\parallel$  Q. One of them is Mozilla?

- 1 A. That's correct.
- 2 | Q. Mozilla makes a web browser for Firefox, correct?
- 3 A. That's correct.
- 4 | Q. If you look down a little bit way towards the end, it says
- 5 | "4.0 Safari," do you see that?
- 6 | A. Yes, I do.
- 7 | Q. Safari, that is Apple's web browser, is that correct?
- 8 A. That is the name of the web browser.
- 9 Q. To be clear, this information is being passed from the Nook
- 10 | to the B&N cloud during shop, is that correct?
- 11 | A. Yes.
- 12 | Q. You agree that selecting the shop icon accesses the shop
- 13 | application, is that right?
- 14 A. Yes. The shop button, to be clear.
- 15 | Q. OK. I guess --
- 16 A. Probably the same thing. Button, icon, sure.
- 17 | Q. Button, I will use that word, fine. You agree with respect
- 18 | to the shop application that users can browse and search the
- 19 B&N storefront on the Internet, correct?
- 20 | A. Yes. But, of course, the term "browse" in that context is
- $21 \parallel$  used to look at titles of books within the Barnes & Noble shop.
- 22 | Their documentation talks about browsing, but to me that is a
- 23 different context for the term "browsing."
- MR. BERTA: Can we have PTX-019, please. Your Honor,
- 25 | for the record, this was admitted.

- 2 A. I have that. Thank you.
- 3 Q. Going to page 19.
- 4 | A. OK.
- 5 Q. I'm sorry. It's not 19. It's 76. To be clear, this is a
- 6 document that you offered in support of your opinions, right?
- 7  $\|$  A. That is correct.
- 8 Q. In your opinions that you provided in this case, you
- 9 | actually have a picture of this page, correct?
- 10 | A. Yes, I do.
- 11 | Q. If you look with me, it says underneath the picture of the
- 12 shop button or icon, it says, "You can browse and search in the
- 13 | shop with an unregistered Nook," correct?
- 14  $\parallel$  A. Yes, it does.
- 15 | Q. Whatever you decide "browser" means, you agree that Barnes
- 16 & Noble says that you can browse and search within shop,
- 17 | correct?
- 18 A. That's what these words say.
- 19 | Q. You agree that the shop application retrieves information
- 20 | from a web page, right?
- 21 A. Yes.
- 22 | Q. Nevertheless, you are of the view that shop is not a web
- 23 | browser because in shop you can't go anywhere on the World Wide
- 24 Web, correct?
- 25 | A. Yes.

2 | A. Yes.

- 3 | Q. I also want to talk about whether there is a predetermined
- 4 | URL associated with the Nook devices. That is another element
- 5 | of claim '703, correct?
- 6 A. That's correct.
- 7 Q. You say that the Nook devices get a set of URLs, download
- 8 | it to the devices after the user registers their device and
- 9 connect it to the Internet, right?
- 10 A. Correct. For all but the Nook 1st Edition, that's correct.
- 11  $\parallel$  Q. In the man-in-the-middle analysis, it showed actually that
- 12 both the HD and the HD+ were connecting to the exact same URL
- 13 | for using shop, is that right?
- 14 | A. I believe that's correct, yes.
- 15 | Q. In fact, you don't dispute that for all Nook devices,
- 16 setting aside the Nook classic, when a user presses the shop
- 17 | application, all the devices contact the same server, correct?
- 18  $\parallel$  A. I believe the Nook 1st Edition contacts a different server,
- 19 | to the best of my recollection.
- 20 | Q. I'm sorry. It's a difference in terms. I say Nook
- 21 | classic, you say 1st Edition.
- 22 | A. I'm sorry.
- 23 | Q. You're calling it the 1st Edition.
- 24 A. Sorry. It's the same one. So yes.
- 25  $\parallel$  Q. Speaking of this man-in-the-middle attack, had you done a

- 1 | man-in-the-middle attack on the Nook 1st Edition/classic, you
- 2 | would have determined what URL it was using and been able to
- 3 know whether it was the same or different, correct?
- 4 | A. That's correct.
- $5 \parallel 0$ . That mistake I think you said was pointed out by Dr.
- 6 Neuman?
- 7 MR. CABRAL: Objection, your Honor.
- 8 THE COURT: Sustained.
- 9 Q. You don't dispute that that same GPB server at the same URL
- 10 | is also used by Nook applications running on other non-Barnes &
- 11 | Noble devices, like Windows Phone, correct?
- 12 | A. I haven't done an investigation beyond the Nook devices, so
- 13 | I don't think I could really comment about that.
- 14 | Q. You are aware that there isn't a separate URL for each
- 15 device, correct?
- 16 A. Wait. Could you provide a little context for that
- 17 | question, please?
- 18 | Q. You are aware that there is not a separate URL for each
- 19 | type of device, correct? The Nook HD doesn't have a different
- 20 | URL than the Nook Glowlight or the Nook classic, right? Sorry,
- 21 | not the classic.
- 22  $\parallel$  A. I believe that's correct, yes.
- 23 | Q. You would agree that one could conclude that the URL used
- 24 | by Nook devices, which is all the same URL, is actually
- 25 | associated with the Barnes & Noble cloud, right, not any of the

1 devices?

- 2 MR. CABRAL: Objection.
- 3 | O. Correct?
- 4 MR. CABRAL: Objection to form, your Honor: Compound.
- 5 THE COURT: I think it is a little bit defective in
- 6 | form. Why don't you rephrase.
- 7 MR. BERTA: Yes, your Honor.
- Q. Let's set aside the Nook classic, because I keep screwing
  that up.
- 10 | A. Sure.
- 11 | Q. Setting that aside, because it was the first one -- and it
- 12 | actually has its own set of dedicated servers somewhere, is
- 13 | that right?
- 14 | A. That's my understanding, yes.
- 15 | Q. All the rest of the Nook devices and all of the Nook
- 16 | applications running on other devices, they all use the same
- 17 URL, correct?
- 18 A. That's my understanding, yes.
- 19 | Q. Would you agree that with that evidence, one could conclude
- 20 | that the URL is actually associated with the Barnes & Noble
- 21 | cloud server rather than any one of those devices? Is that
- 22 | fair?
- 23 | A. I don't think that's fair, no.
- 24 | Q. You don't think it's right, right? But it's fair?
- 25 || A. The way you're using the word "association," I think the

- 1 | way you're stating the question, it's hard to respond directly
- 2 | to that. By virtue of the fact that simply different devices
- 3 | might use the same URL doesn't mean that this association works
- 4 | the other way, which I think is what you are trying to imply.
- 5 Q. Your position turns on your understanding of the word
- 6 | "associated," right?
- 7 A. I'm just responding to your question the way it was stated.
- 8 | Q. Setting aside the URL, claims 1 and 13 of the '703 also
- 9 refer to an identifier, right?
- 10 A. Yes, they do.
- 11 | Q. If you don't use a URL that is associated with a device for
- 12 | claim 1, you have to have an identifier; otherwise, you are
- 13 | outside of claim 1, is that fair?
- 14 A. Yes. For claim 1 it is either URL or identifier, that's
- 15 correct.
- 16 | Q. Assuming there is no URL associated with a device, just as
- 17 | an assumption, then you have to have an identifier associated
- 18 | with the device that retrieves the information; otherwise, you
- 19 | are not within claim 1 of the '703, fair?
- 20 A. That's fair.
- 21 | Q. The retrieval of information -- claim 1 requires, assuming
- 22  $\parallel$  no URL, that the retrieval of data is based on the identifier,
- 23 | correct?
- 24  $\parallel$  A. State that one more time, please.
- 25 | Q. Setting aside the URL issue for the moment, if there is no

- 1 URL, claim 1 requires that the retrieval of data is based on 2 this identifier, fair?
- I believe that's correct. Maybe we should put the patent 3
- That would help the jury as well. 4
  - I am all for that. I'll move it?
- 6 I think that is a handy --

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- THE COURT: No, no, no. It is not for you to be giving directions to anyone about where a thing should be placed, what should be placed, or anything like that. You are only to answer questions and only that. Do you understand?
- 11 THE WITNESS: Yes, your Honor.
- 12 THE COURT: Very good.
- 13 I think it is better up on the screen, because that 14 has been a consistent source of my being unable to see 15 anything. It's fine that the jury can see it, it's fine that 16 the witness can see it, but I have gone through this whole 17 trial without seeing anything because of the way it has been 18

placed on the board. Let's put it up on the screen.

- 19 MR. BERTA: Yes, your Honor.
- 20 BY MR. BERTA:
- 21 It is correct, again, that it says here, "based on a 22 predetermined URL or an identifier associated with the consumer 23 appliance, " correct?
- 24 Α. That's correct.
- If you do not have a predetermined URL, you have to have an 25

- 1 | identifier; otherwise, you agree, you are missing the
- 2 | identifier, you are outside of claim 1, correct?
- 3 | A. That's correct.
- 4 | Q. Claim 1 requires that the retrieval of data is based on the
- 5 | identifier, correct?
- $6 \parallel A$ . For example, yes.
- 7 | Q. You used your man-in-the-middle analysis to see what
- 8 | identification information is passed from a Nook device to the
- 9 B&N cloud for shop, correct?
- 10 A. That's correct.
- 11 | Q. For the HD and the HD+ only, correct?
- 12 A. That is correct.
- 13 | Q. The identifier you point to from your man-in-the-middle
- 14 | analysis is the same for all the claims of the '703 patent, is
- 15 | that right?
- 16 A. Right. I point two identifiers, yes.
- 17  $\parallel$  Q. You talk about a device ID and a model number?
- 18 A. That's correct.
- 19 | Q. You agree with me that you never provide an analysis of
- 20 | what the server does with the device ID or the model number,
- 21 correct? Your evidence is that it is passed to the cloud?
- 22 MR. CABRAL: Objection to the form, your Honor: Two
- 23 | questions.
- 24 THE COURT: Yes. Which are you asking?
- 25 MR. BERTA: I'm sorry, your Honor.

- 1 | Q. You agree with me that in your analysis today what you
- 2 | talked about was what was passed to the cloud; you have not
- 3 provided any evidence with respect to what actually happens on
- 4 | the cloud with either the model number or the device ID,
- 5 | correct?
- 6 A. I have provided evidence beyond that.
- 7 | Q. You agree with me that in your report that you provided in
- 8 | this case, you do not provide any evidence of what the server
- 9 does, if anything, with the device ID or the model number,
- 10 correct?
- 11 A. I believe I provide evidence that shows that -- for
- 12 | example, Mr. Mulchandani discusses the use of that information.
- 13 | I used the man-in-the-middle information along with what he
- 14 | says to provide my opinion.
- 15 | Q. If we want to know what the server does, we would look to
- 16 Mr. Mulchandani, is that correct?
- 17 A. He provided knowledgeable information about that.
- 18 | Q. But your evidence is what is passed to the cloud and what
- 19 | is responded to from the cloud, correct?
- 20  $\parallel$  A. The data I captured personally is that, yes.
- 21 | Q. If the evidence shows that this model number isn't used for
- 22 | any purpose in actually retrieving information, you don't have
- 23 | a quarrel with that, is that correct?
- 24 MR. CABRAL: Objection, your Honor.
- 25 THE COURT: Ground?

- 1 MR. CABRAL: I honestly don't know what "quarrel"
- 2 means in that context.

- THE COURT: I think in this context it means you don't disagree.
- 5 MR. CABRAL: In that case there will be no objection, 6 your Honor.
  - A. Could you restate, please.
- 8 Q. If evidence shows that the model number isn't used for any
- 9 purpose in retrieving information from the cloud, you wouldn't
- 10 disagree with that, correct?
- 11 A. I guess I find that guestion a little bit hard to answer.
- 12 | I wouldn't disagree with the evidence --
- 13 | Q. Your man-in-the-middle analysis can't show that the model
- 14 | number is used for a purpose, correct?
- 15 A. Not in and of itself, no.
- 16 | Q. The same holds true for the device ID: Your evidence and
- 17 | your man-in-the-middle analysis can't show that the device ID
- 18 | is used for any purpose, correct?
- 19 A. That is correct.
- 20 | Q. Claim 13, it's a method claim, true?
- 21 A. That's correct.
- 22 | Q. An enabling step and then, based on the identifier, an
- 23 | initiating step, is that correct?
- 24 A. That's a fair way to characterize it.
- 25  $\parallel$  Q. You agree that the identifier with respect to claim 13 is

- 2 consumer appliance, is that correct?
- 3 A. Yes, that's what the words of the claim read.
- 4 Q. I think you said -- actually, I wrote down what you said.
- 5 | Is it your understanding that the device ID is actually an ID
- 6 | for each specific Nook device, correct?
- 7 A. I believe the device ID can vary. You are saying each
- 8 | physical one?
- 9 Q. Yes.
- 10 A. Each physical one, I believe that's correct.
- 11 | Q. Imagine I had two Nook HDs in my hand. Each one will have
- 12 | a different device ID, correct?
- 13 | A. I believe that's correct.
- 14 | Q. Your man-in-the-middle analysis can't tell you whether the
- 15 | model number is responsible for retrieving any information with
- 16 | respect to claim 13, is that correct?
- 17 MR. CABRAL: Objection, your Honor: Asked and
- 18 | answered.
- 19 || THE COURT: I'll allow it.
- 20  $\parallel$  A. There isn't any direct evidence that it provides in and of
- 21 itself.
- 22 | Q. Incidentally, I think you said this, you say that the Wi-Fi
- 23 | capability on the Nook devices can be configured for use on a
- 24 | home network, is that right?
- 25 A. I believe I said they come configured for use.

- 1 | Q. Claim 13 is a method claim, correct?
- 2 A. That's correct.
- 3 | Q. Someone has to perform all the steps of the method,
- 4 | correct?
- 5 A. Somehow they need to be performed, yes.
- 6 Q. The same someone has to perform all the steps, correct?
- 7 A. Some identified entity needs to.
- 8 Q. OK. But some identity, whatever that identity is --
- 9 A. Or entity.
- 10 | Q. OK. A person, company, something, that same thing, entity,
- 11 person, has to perform all the steps, correct?
- 12 MR. CABRAL: Objection, your Honor.
- 13 THE COURT: Overruled.
- 14 | Q. True?
- 15 A. That would be my understanding.
- 16 | Q. You say it's Barnes & Noble that is taking every step of
- 17 | method claim 13, correct?
- 18 A. That's correct.
- 19 | Q. You agree, though, and may have said this, out of the pox
- 20 | the Nooks aren't actually connected to anyone's home network,
- 21 | correct?
- 22 | A. That would be correct.
- 23  $\parallel$  Q. So they are not yet actually enabled to do any
- 24 communication, because they can't actually communicate right
- 25 | out of the box, true?

- 1 Right out of the box, they cannot communicate, that's 2 correct.
- 3 The user has to go through the steps of connecting to their 4 own home network in order to actually enable the Nook to be 5 used, correct, for shop or anything else?
- 6 They would have to go through some set-up steps.
- 7 In fact, in your own testing of the Nook devices, you had 8 to connect the Nook to a Wi-Fi signal in order to actually do 9 any testing, correct, besides the tear-down?
- 10 I did, yes.
- 11 In fact, you agree that the user guides that I think you 12 discussed yesterday say, in order to access the shop on your 13

Nook, you must be connected to a Wi-Fi network, right?

- 14 You must be, yes. Α.
- 15 The user has to do that, correct?
- 16 Which claim are we talking about right now?
- 17 I'm talking about who connects the Wi-Fi.
- 18 OK. Α.
- 19 You have no opinion in this case that users of Nook devices 20 are acting under Barnes & Noble's direction or control,
- 21 correct?
- 22 They certainly interact. They run Barnes & Noble software, 23 and they certainly interact with the cloud that is created by 24 Barnes & Noble.
- 25 MR. BERTA: Your Honor, I would propose 208, lines 11

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- 19 20 devices, to be clear, if you and a friend both owned Nook 21 devices and you loaned a book to that friend via Lend Me, the 22 Nook devices don't communicate with one another, correct?
- 23 Not directly, no.
- 24 All communications pass through the cloud, right?
- 25 Or at least through portions of the Internet as well as the

- 1 cloud, yes.
- 2 Q. Do you agree that the Court's construction for the '501
- 3 patent requires that the predetermined time begins when the
- 4 | electronic book is stored on the viewer, correct?
- 5 MR. CABRAL: Objection, your Honor. He refers to a
- 6 construction from the patent as opposed to a particular element
- 7  $\parallel$  of the claim.
- 8 MR. BERTA: I'll lay a foundation, your Honor.
- 9 THE COURT: All right.
- 10 | Q. Every one of the claims in the '501 patent --
- 11 MR. BERTA: I'll lay a foundation in one second, your
- 12 Honor.
- 13 | Q. Start with claim 7. Could we have claim 7. Claim 7 says,
- 14 | "associating a predetermined amount of time after the
- 15 | electronic book is stored on the viewer with the electronic
- 16 | book, " correct?
- 17 | A. That's what the words say, that's correct.
- 18 | Q. It is your understanding that the Court construction
- 19 requires that the predetermined amount of time begins when the
- 20 | electronic book is stored on the viewer, correct?
- 21 A. That's what the construction says, yes.
- 22 | Q. Let's talk about step by step what happens. With respect
- 23 | to the Lend Me functionality, you have a device, the Nook
- 24 device, right?
- 25 | A. OK.

- 2 offer, fair?
- 3 Α. OK.
- 4 Assuming an offer has been made? 0.
- 5 That's correct, yes. Α.
- 6 That they want to accept? Ο.
- 7 That's correct, yes. Α.
- Then the cloud is notified of the acceptance, correct? 8
- 9 That's correct. Α.
- 10 The calculation of the time period is done on a cloud
- 11 server, correct?
- 12 Α. Yes.
- 13 Then B&N's cloud server sends to the Nook device the time
- 14 period information as well as the URL from which the device can
- 15 then download the loaned book, correct?
- 16 That's right.
- 17 The URL I think you discussed with respect to the '851
- 18 patent, what does the URL point to?
- 19 The URL points to the content provider.
- 20 Q. When someone wants to actually get a book to a Barnes &
- 21 Noble device, they don't go to Barnes & Noble directly,
- 22 correct?
- 23 A. Not directly.
- 24 Q. You actually have to get the books from Akamai, because
- 25 there is an Akamai repository that stores all of the Barnes &

- 2 A. That's correct.
- 3 | Q. When the time period and the URL come down to the device,
- 4 | in a Lend Me situation, the device still doesn't have the book
- 5 | vet, correct?
- 6 A. That's right.
- 7 | Q. It's got to go negotiate a discussion with the Akamai
- 8 server and then commence the process of downloading the book
- 9 | from Akamai, correct?
- 10  $\parallel$  A. That would be a reasonable way to characterize it, yes.
- 11  $\parallel$  Q. It is only after the Akamai session is started that the
- 12 book starts to download from Akamai, is that right?
- 13 A. Yes, that's right.
- 14  $\parallel$  Q. Then, at some point all of the book bytes are going to make
- 15 | their way down to the Nook device, correct?
- 16 | A. Yes.
- 17 | Q. You would agree that the sequence with respect to Lend Me
- 18 | is the following: Calculation of the time period at the
- 19 server, then invocation of the download, then the download of
- 20 | the book to the device from Akamai, correct?
- 21 A. Right, preceded, of course, by the acceptance of the Lend
- 22 | Me.
- 23  $\parallel$  Q. So it is true that the calculated time period already
- 24 existed before the book was downloaded to the device from
- 25 | Akamai, correct?

- 1 A. That's correct.
- 2 | Q. It existed on the server, correct?
- 3 | A. Correct.
- 4 | Q. To be clear, this whole discussion is a discussion of a
- 5 Lend Me performed on a Nook device, right, of an acceptance on
- 6 | a Nook device?
- 7 A. That's correct.
- 8 | Q. You agree that if someone wanted to loan me a book and I
- 9 wanted that book, I could accept the lend offer without using a
- 10 | Nook device at all, correct?
- 11 MR. CABRAL: Objection, your Honor: Outside the scope
- 12 of the expert's analysis.
- 13 | THE COURT: I'm not quite sure where this is going. I
- 14 | will allow it contingently. We will see what the next couple
- 15 of questions are.
- 16 MR. CABRAL: I apologize. It was more of a relevance
- 17 | objection.
- 18 THE COURT: I understand.
- 19 MR. BERTA: Thank you, your Honor. I will try to make
- 20 | it relevant quite quickly.
- 21 | Q. You can accept a lend offer without using a Nook device,
- 22 | correct?
- 23 | A. I believe that's correct.
- 24 | Q. You could accept a lend offer from the Barnes & Noble
- 25 website, correct?

- 1 A. I believe so. I haven't, like I say, done much -- I didn't
- 2 | really do much experimenting that way, but I believe that's
- 3 correct.
- 4 | Q. You are aware that the lending period, give or take a
- 5 | little, is 14 days per lending, correct?
- 6 A. Yes.
- 7 | Q. If I accept a lend offer via Barnes & Noble's website while
- 8 | my Nook device is turned off -- do you have that in mind?
- 9 | A. Yes, I do.
- 10 | Q. If I turn my Nook device on 3 days later and download the
- 11 | book, it is true that there would only be 11 days left in the
- 12 | lending period, correct?
- 13 A. That would make sense, yes.
- 14 | Q. Because the time period existed on the server regardless of
- 15 whether the Nook device was turned on, correct?
- 16 A. That's correct.
- 17 | Q. In your knowledge, that's how it works in all Lend Mes; the
- 18 | time period exists on the server independent of what happens on
- 19 | the device, is that correct?
- 20 A. It's calculated there, yes.
- 21 | Q. I think you said something about it's equivalent because it
- 22 | is really fast. That's not what you said, but I just want to
- 23 get us to that area of your opinion. Is that fair?
- 24 | A. I did describe it being very quick and showed a little demo
- 25 | that was extremely quick, yes.

- 1 Q. Quite quick. If you are on a device and you accept a loan
- 2 offer, we agree that the time period is calculated and comes
- 3 | into existence on the Barnes & Noble cloud server when the
- 4 server is notified of the acceptance, correct?
- 5 | A. Yes.
- 6 | Q. Then you are going to get the URL down to the device,
- 7 | correct?
- 8 A. That's correct.
- 9 Q. What if all of my Akamai servers are down, every one of 10 them, even though they have I think like a million servers?
- 11 MR. CABRAL: Objection, your Honor: Relevance.
- 12 THE COURT: Let me hear the end of the question. Was
- 13 | that the question?
- MR. BERTA: Not yet. That is part of the
- 15 | hypothetical, your Honor.
- 16 THE COURT: All right.
- 17 | Q. Assume that all the Akamai servers are down, correct?
- 18 A. OK.
- 19 | Q. Isn't it correct that, first, if all the Akamai servers are
- 20 down, you're not going to get your book even though you
- 21 | accepted it on the Lend Me device, correct?
- 22 MR. CABRAL: Objection, your Honor. This is not
- 23 | relevant to infringement.
- 24 THE COURT: Come to the side bar.
- 25 (Continued on next page)

1 (At the side bar)

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THE COURT: I'm having trouble seeing the relevance of this also.

MR. BERTA: The relevance, your Honor, is his opinion is that it is all one transaction. In his infringement opinion is he says even though the time period is calculated on the server, because it is all one transaction, you can consider it substantially the same for DOE.

Our expert is going to testify, and I believe we should be able to ask him questions illustrating, that it isn't one transaction, because as a matter of computer science a transaction is defined as to whether it is atomic, which means that if there is a break in the transaction, if it doesn't complete, that is proof that it is not one transaction.

If the device never gets the book even though the device did the accepting, which is their theory of infringement, that goes to whether it is an equivalent or not.

MR. CABRAL: Your Honor, I think the case law is pretty clear that defendants cannot rely on whether it is not accused configurations or these sort of wild hypothetical scenarios as proof of noninfringement. They are distracting to the jury. The case law is clear that you can't use that as whether or not the accused functionality actually meets the claim element.

THE COURT: I agree with that as a general

proposition. But what he is doing, he is impeaching an assertion made by your witness by showing that in fact it doesn't correspond to what occurs in reality. I don't think that is precluded.

MR. CABRAL: I think he can pursue that line of questioning without talking about a scenario in which all the Akamai servers mysteriously go down in some tragic disaster or something like that. The line of questioning I think is valid, but I don't think this is the proper way to do it.

THE COURT: I am going to allow it. I do agree that it could be distracting. Finish up this line, and then we are going to break for lunch.

MR. BERTA: Yes, your Honor.

(Continued on next page)

1 (In open court)

- Q. I'm not totally sure where we were, exactly where we
- 3 started, but I'm going to try and pick us up. You have an
- 4 | acceptance, the acceptance goes to the server, the server
- 5 calculates the time period, it then sends the time period down
- 6 | to the device along with the URL, correct?
- 7 A. That's right.
- 8 | Q. You have the URL. You take the URL and you go to Akamai,
- 9 and all of the Akamai servers are down. Do you have that in
- 10 | mind a hypothetical?
- 11 | A. I do.
- 12 | Q. You are not going to get the book bytes, correct?
- 13 A. I've never experienced that scenario. It could be Akamai
- 14 has some kind of a fail-over capability, I don't know.
- 15 | Q. You can't get the book bytes, because they are at Akamai,
- 16 | correct, in the hypothetical?
- 17 A. Presumably. Like I said, I don't honestly know, but I'm
- 18 | willing to assume that there is no fail-over.
- 19 | Q. In that instance you don't have the book bytes on the
- 20 device, correct?
- 21 A. That's correct.
- $22 \parallel Q$ . But the time period is still running on the server, is that
- 23 || correct?
- 24 A. Yes. Well, actually, the time period will have been
- 25 | calculated.

## AFTERNOON SESSION

2:00 p.m.

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THE COURT: Let's get the witness on the stand and bring in the jury.

How much longer do you have with this witness?

MR. BERTA: I believe about an hour.

Can I ask you one question?

THE COURT: Yes.

MR. BERTA: I want to show him some testimony.

THE COURT: He is here.

MR. BERTA: I will tell him. I want to show him some testimony, and I don't know physically how to do it.

THE COURT: You're saying testimony from the trial?

MR. BERTA: Testimony from a deposition.

THE COURT: As opposed to reading it, you want to put it up on the screen?

MR. BERTA: Yes.

THE COURT: Go ahead.

MR. BAUER: He is talking about somebody else's testimony.

THE COURT: No. The basic rule -- there are exceptions to this. The basic rule is a witness does not comment on another witness's testimony. The exception to that is where an expert, as part of his or her report or something about the report, has commented, and then it's permissible. So

1 | (Jury present)

2 | BRIAN BERG, resumed.

3 | THE COURT: Please be seated.

All right counsel.

BY MR. BERTA:

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- 6 Q. With respect to the Lend Me or library patent, yesterday
- 7 | you mentioned that one of the things you considered was
- 8 Mr. Sudeep Narain's testimony, is that correct?
- 9 A. That's correct.
- 10 Q. And you provided a report in this case, is that right, of
- 11 | your opinions?
- 12 A. That's correct, yes.
- 13 | Q. In that report, you also referred to Mr. Narain's
- 14 | deposition testimony, correct?
- 15 A. Yes.
- 16 | Q. For at least your understanding of what he was saying,
- 17 | correct?
- 18 A. I believe that would be a good way to state it, yes.
- 19 Q. So I looked at the testimony on which you mentioned that
- 20 you relied.
- 21 As a side note, you also relied on Mr. Mulchandani's
- 22 | testimony, correct?
- 23 | A. That's correct.
- 24 | Q. Or again, at least your understanding of his testimony,
- 25 | correct?

1 (At the sidebar)

"would it surprise you that" is blatantly improper. It is, in effect, putting the credibility of the questioner in issue.

Therefore, if any attorney in this case were to do that again,

I would impose sanctions. Despite the fact that many, many

lawyers make this mistake, it's because they don't understand

the difference between being a lawyer and being a witness. So

I just wanted to advise everyone of the consequences.

MR. BERTA: Thank you, your Honor.

(Continued on next page)

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- 1 (In open court)
- 2 BY MR. BERTA:
- 3 Q. Is it correct that you relied on Mr. Mulchandani 50 times
- 4 | in your expert report?
- 5 THE COURT: Sustained. On different grounds, but
- 6 | sustained.
- 7 MR. CABRAL: Can we approach sidebar one more time?
- 8 | It relates to Mr. Mulchandani's testimony.
- 9 THE COURT: OK.
- 10 MR. BERTA: I am going to move on if that solves the
- 11 issue.
- 12 THE COURT: All right. You mean you're going to
- 13 deprive the jury of having to sit there while we have a lengthy
- 14 | sidebar?
- Go ahead, counsel.
- 16 BY MR. BERTA:
- 17 | Q. I want to show you some testimony from Mr. Narain, which he
- 18 | gave at his deposition. OK?
- 19 | A. OK.
- 20 | Q. I will tell you what it is, but it's in my notes.
- 21 We are going to come back to that later when I find
- 22 | that citation.
- 23 | MR. BERTA: Can I have Narain 39, 12 to 25.
- No. Sorry. That is not the right citation.
- 25 Sorry, your Honor. I will move on.

- 1 | Q. Some of the '501 claims are method claims, correct?
- 2 A. That's correct.
- 3 | Q. Namely, claim 7, 8 and 9, correct?
- 4 | A. Yes.
- 5 Q. You contend that the claim method is performed on Nook
- 6 devices, correct?
- 7 A. Well, the method is performed by Barnes & Noble.
- 8 Q. On a Nook device, correct?
- 9 A. Through a Nook device. There's Barnes & Noble software
- 10 | that runs in the cloud as well as in the device.
- 11 | Q. So it's through a device, but not on a device, is that
- 12 | correct?
- 13 A. Well, the device operates by way of software running the
- 14 components, and Barnes & Noble has created the software that
- 15 | runs those components in the device.
- 16 | Q. But you agree with me that when one Nook customer lends a
- 17 | book to another Nook customer, the Nooks are actually in the
- 18 possession, custody and control of the users at that point,
- 19 | correct?
- 20  $\parallel$  A. They certainly retain them and they use them.
- 21 | Q. Nook users lend books to one another, correct?
- 22 A. By way of the Barnes & Noble software, yes.
- 23 | Q. Barnes & Noble isn't lending books to anyone, correct?
- 24 MR. CABRAL: Objection, your Honor.
- 25 THE COURT: Overruled.

- A. Barnes & Noble creates a software infrastructure, including the cloud, that allows this lending process to happen.
- 3 | Q. But the lending is initiated by the users, right?
- 4 A. Right. For example, a loan offer can be provided by a user
- 5 | by way of the Barnes & Noble software that allows that to
- 6 happen.
- 7 | Q. You have no opinion in this case that users of Nook devices
- 8 | are acting under Barnes & Noble's direction or control,
- 9 | correct?
- 10 MR. CABRAL: Objection, your Honor. This line of
- 11 | questioning goes to issues that are not relevant to the claim.
- 12 THE COURT: Overruled.
- 13 A. Could you restate the question, please?
- 14 | Q. You have no opinion in this case that users of Nook devices
- 15 | are acting under Barnes & Noble's direction or control,
- 16 | correct?
- 17 | A. I don't know if they are acting under their control, but
- 18 | they are certainly using the software that allows them to do
- 19 | these things we are talking about.
- 20  $\parallel$  MR. BERTA: Would I be able to read 208, 11 to 15?
- 21 THE COURT: 208. What was the lines?
- 22 MR. BERTA: 11 to 15.
- 23 | THE COURT: Any objection?
- 24 MR. CABRAL: Your Honor, I think this was already read
- 25 | into the record.

1 THE COURT: Is there any objection?

2 MR. CABRAL: No objection.

3 THE COURT: OK.

BY MR. BERTA:

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5 | "Q. You have provided no opinion in this case that users of

Nook devices are acting under Barnes & Noble's direction or

control, correct?

"Objection.

"A. I believe that's correct."

I do want to move on to the '851 patent.

- 11 | A. OK.
- 12 | Q. The '851 patent is expired, correct?
- 13 A. Yes, that is my understanding.
- 14 | Q. It's your understanding that for the claim at issue, the
- 15 priority date for the claim is 1999, is that correct?
- 16 A. I would want to look at the face of the patent, but if you
- 17 | represent that to me as correct, I will accept that.
- 18 | Q. I want to talk a little bit about how the Nook works or how
- 19 books on the Nook work.
- 20 Barnes & Noble gets books from publishers, right?
- 21 A. Well, there are books that are turned into electronic books
- 22 | that they are able to sell, and of course they have
- 23 | brick-and-mortar storefront as well.
- 24 | Q. You agree that Barnes & Noble gets all of its books from
- 25 | its publishers, correct?

- 1 A. I presume that. I guess I don't know with certainty every 2 single book of theirs.
- 3 Q. With respect to the electronic books that Barnes & Noble
- 4 gets from its publishers, it encrypts a lot of its books, is
- 5 | that correct?
- 6 A. Yes.
- 7 Q. It does it pursuant with agreements with the publishers.
- 8 Do you know that one way or the other?
- 9 A. I am presuming that's accurate. That would certainly be a typical kind of business model.
- 11 Q. And Barnes & Noble actually encrypts all of the electronic
- 12 | books it's going to encrypt when it gets the books from the
- 13 publishers in a process called ingestion, is that correct?
- 14 A. I don't know for certain for every single book, but I do
- 15 know that the typical process by which a book becomes available
- 16 | electronically is usually called an ingestion process, yes.
- 17 | Q. It's correct that for any books that are going to be
- 18 encrypted, electronic books that are going to be encrypted,
- 19 | they go through the ingestion process, true?
- 20 | A. I believe that's at least generally true. Once again, I
- 21 don't know with certainty for every single case, but that's in
- 22 general true.
- 23 | Q. You know that Barnes & Noble uses as the encryption scheme
- 24 || for this ingestion process Adobe's ACS4 technology, right?
- 25 A. I know that they have an agreement with them, and the

electronic books that I have been exposed to and looked at have appeared to have gone through that process with the ACS4, yes.

I am just saying that you seem to be making a blanket statement, and the ones I have been exposed to, the ones that I have used for my study have been involved that way, yes.

- Q. So you don't have any reason to believe that they are not encrypted with ACS4, right?
- A. I know that's a typical process that is done, yes.
- 9 Q. Now, it's true that before this case you have never had any occasion to study Adobe's ACS4 encryption technology, is that
- 12 A. I don't believe so.

correct?

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- Q. In fact, for this case, you enlisted a gentleman named

  Peter Martin to help you on the case, is that right?
- 15 A. I had him under my direction, yes.
- Q. What you enlisted him for was to do analysis of what Adobe software was out there and how it might possibly be used in
- 18 | this environment, is that correct?
- 19 A. I asked him to help me do some investigation on that during 20 the process, yes.
- Q. What happened was he looked at the Adobe Web site, and he read some materials, and then you and he sat around and made some theories as to how Adobe was possibly involved with the operation of the Nook devices, correct?
- 25  $\parallel$  A. I think that's roughly correct, yes.

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- Q. So would you agree that you would not call yourself an Adobe ACS4 expert?
- MR. CABRAL: Objection, your Honor.
- 4 THE COURT: Ground.

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- MR. CABRAL: Mr. Berg's expertise is not in Adobe
  ACS4, specifically, but in the general subject matter of the
  technology that is at issue in this case.
  - THE COURT: Counsel, that's for him to say, not for you. Overruled.
- 10 A. I believe I am an expert in that technology as it relates
  11 to this case.
  - Q. But you agree, setting aside the opinions that you're giving here, you're not an expert on ACS4, is that right?
- A. Well, I certainly studied the operation of how that worked in this whole environment, but ACS4 is actually quite a large infrastructure and much of it is used by Barnes & Noble for
- 17 | ingestion of the books. So it includes many different steps.
- 18 | I was exposed to one portion of that, which was the resultant
- 19 product created from their ingestion process, as well as the
- 20 software that ran on the Nook that was able to read books that
- 21 | had been ingested.
- 22 Q. You agree that after ingestion, the Barnes & Noble
- 23 | electronic books that are going to be encrypted are encrypted
- 24 | with Adobe ACS4 technology and all of them are stored in
- 25 | Akamai, correct?

- 1 A. I believe that's correct. Once again, I don't know with
- 2 certainty every one, but certainly the ones I was exposed to
- 3 and worked with, books that I purchased, fall into that
- 4 category.
- Q. Any electronic book that you touched in this case came from
- 6 | Akamai?
- 7  $\parallel$  A. To my knowledge, yes.
- 8 | Q. And that encryption and ingestion process and the storage
- 9 | to Akamai, all of that happens before any books are actually
- 10 | made available for purchase by Nook users, correct?
- 11 | A. That's my understanding, yes.
- 12 | Q. You would agree that claim 96 of the '851 patent is pretty
- 13 | complex, right?
- 14 | A. It's got quite a few claim elements.
- 15 | Q. And you agree that it is possible to have a commercially
- 16 | acceptable noninfringing alternative to claim 96, correct?
- 17 MR. CABRAL: Objection. Lack of foundation.
- 18 THE COURT: Overruled.
- 19 A. With regard to commercially acceptable alternative, there's
- 20 certainly encryption steps that are used in the passage of
- 21 | books to the user. So it would be possible for there to be,
- 22 for example, non-encrypted books that could be provided to the
- 23 user.
- 24 MR. BERTA: Your Honor, could I ask for page 234,
- 25 | lines 11 to 21?

THE COURT: Any objection?

2 MR. CABRAL: No objection, your Honor.

3 THE COURT: OK.

BY MR. BERTA:

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5 | "Q. So you acknowledge at least that it's possible to have a

6 | noninfringing alternative, commercially acceptable

7 | noninfringing alternative, for claim 96 of the '851 patent?

"A. I'm saying that's a possibility that it would be possible.

You could design a device that would not infringe.

"Q. OK. A commercially acceptable device?

"A. Right."

To be clear, a noninfringing alternative means a device that accomplishes encryption on e-readers, but doesn't meet the claim 96 requirements, correct?

15 A. When you say accomplishes encryption on e-readers, because

16 there's encryption of books, there's encryption of the access

17 | to the books, I'm not sure which part of the encryption you're

referring to. Because there is like at least three levels of

encryption we are talking about here.

Q. Correct. And you agree that you can have a device that has

encrypted books on it that doesn't use claim 96, correct?

22 A. That had encrypted books on it?

Q. Yes.

24 A. I believe I was referring to books that were non-encrypted.

Q. Did you discuss this opinion of yours that it was possible

- 1 to have a commercially acceptable noninfringing alternative to
- 2 | claim 96 with Mr. Magee?
- 3 | A. No.
- 4 Q. Do you know who he is?
- 5 A. I believe he is one of the other experts in this case.
- 6 Q. As I think you may have just referenced, there is a lot of
- 7 | different encryption requirements in this claim, correct, in
- 8 | claim 96?

- A. There are different ones that are part of it, yes.
- 10 | Q. It's correct that claim 96 actually requires, quote,
- 11 | encryption information in multiple different places in this
- 12 | claim, correct?
- 13 | A. There's two instances of encryption information, yes.
- 14 | Q. Let's count them. It's up on the board.
- Is it correct that there is a reference to encryption
- 16 | information, if you look to the little numbers on the side,
- 17 | where it says "receives transmitted text."
- 18 It says, "Receives transmitted text associated with
- 19 | the selected title as encrypted electronic books and encryption
- 20 | information." Do you see that?
- 21 | A. Yes.
- 22 | Q. That's one?
- 23 | A. That's one.
- 24 | Q. It says, "A memory coupled to the receiver that stores the
- 25 | encrypted electronic books and the encrypted information." Do

- 1 you see that?
- 2 | A. Yes.
- 3 | Q. It says, "A processor coupled to the memory that processes
- 4 | the encryption information using an encryption/decryption
- 5 | algorithm." Do you see that?
- 6 | A. Yes, I do.
- 7 Q. Then it says, "A transmitter coupled to the processor that
- 8 sends encryption information to the sending party." Do you see
- 9 | that?
- 10 A. Yes.
- 11 | Q. Then it says, "Wherein the encryption information includes
- 12 | information that allows encryption and decryption of the
- 13 | electronic book and encryption and decryption of encryption and
- 14 decryption keys." Do you see that?
- 15 | A. Yes, I do.
- 16 | Q. Now, you labeled these different claim elements with your
- 17 | own letters during your report, but you labeled them
- 18 differently than you did on here, right?
- 19 A. That's correct, yes.
- 20 | Q. So just work with me because what I have in mind is the way
- 21 | you did it in your report.
- 22 Let's call the first one there, "receives transmitted
- 23 | text associated, " do you see that element?
- 24 | A. Yes, I do.
- 25  $\parallel$  Q. Can we call that element D because that's what you called

- 2 A. D? Yes. That sounds right, yes.
- 3 | Q. Can we say that a memory coupled to the receiver, can we
- 4 | call that element E?
- 5 | A. OK.
- 6 Q. And where it says, the last one, "A transmitter coupled to
- 7 | the processor that sends encryption information, " do you see
- 8 | that, the whole rest of the claim there?
- 9 A. Yes.
- 10  $\parallel$  Q. Can we call that H?
- 11 | A. Sure.
- 12 | Q. Now, it's your opinion that in order to meet this claim D,
- 13 | which is the "receives transmitted text," and E, "the memory
- 14 coupled element, can be the same as one another, correct?
- The encryption information referred to in both of
- 16 | those elements can be the same encryption information, right?
- 17 | A. That's correct. And certainly because of the antecedent
- 18 | basis, that is, the word "the."
- 19 Q. I just want to know yes or no.
- 20 | A. Yes. So in those first two highlighted elements, the
- 21 encryption information is the same.
- 22 | Q. Let me ask it better. The encryption information that you
- 23 | point to in the devices that you accuse of infringement is the
- 24 | same information with respect to elements D and E, correct?
- 25 A. Yes.

- 1 | Q. The encryption information that you point to with respect
- 2 to the accused devices that you say is encryption information
- 3 | for purposes of element H, that's different information,
- 4 | correct?
- 5 A. That is correct, yes.
- 6 Q. Now, for D and E, you contend that the encryption
- 7 | information is portions of what I think you said is a license
- 8 | and something called a CC hash, is that correct?
- 9 A. Right.
- 10 | Q. Now, the license is a piece of information that comes from
- 11 | Barnes & Noble servers, correct?
- 12 A. That's correct.
- 13 | Q. And it contains within it the decryption key for an ACS4
- 14 | encrypted book, correct?
- 15 A. That's correct.
- 16 | Q. And the CC hash is another key that can be used to decrypt
- 17 | the decryption key for the ACS4 process, correct?
- 18 A. That's correct, yes.
- 19 | Q. And you say that for element E, both of those things are
- 20 | stored in the device itself, is that correct?
- 21 A. That's correct.
- 22 | Q. When we get to element H, it says, "A transmitter coupled
- 23 | to the processor that sends encryption information to the
- 24 | sending party, " at least at the beginning, correct?
- 25 | A. Yes.

- 1 Q. If you want to read the whole thing, that's fine. But it's
- 2 | a sending requirement, correct?
- 3 A. Right. It includes a sending requirement.
- 4 | Q. So in order to meet that element, there actually has to be
- 5 | the Nook device itself sending some piece of information to
- 6 Barnes & Noble or whoever, correct?
- 7 | A. That's correct.
- 8 | Q. Now, for the first encryption information you say it's the
- 9 | ACS4 decryption key and CC hash, right, the ones we were
- 10 | talking about before, D and E?
- 11 | A. Right. You're saying that -- once more recite that.
- 12  $\parallel$  Q. So for D and E, it's the ACS4 key and CC hash, right?
- 13 A. I was referring also to the license file which contains
- 14 | that. Basically, it's in the license file. CC hash is not in
- 15 | the license file, but the other is.
- 16 | Q. There is a license file and it contains the ACS4 decryption
- 17 | key, and there is a CC hash. And those are the things that you
- 18 | say is encryption information for D and E?
- 19 | A. Right.
- 20 | Q. But for H, you switch it up, is that correct?
- 21 A. Well, it's a different -- it doesn't begin with "the" so
- 22 | it's necessarily a different encryption information.
- 23 | Q. So yes, you switch it up?
- 24 A. If you want to call it switch it up, yes.
- 25  $\parallel$  Q. And for H, your opinion is that the encryption information

- because it's actually information that relates to SSL?
- 2
- 3 Α. Correct.
- 4 Now, do we agree that what Nook devices use to communicate
- 5 is actually this process called TLS, is that right?
- 6 Right. That's correct. Α.
- 7 And TLS is a later version of SSL, is that right?
- 8 That is correct. Α.
- 9 Sometimes I use TLS, sometimes I use SSL. Can we agree
- 10 that for purposes of today those mean the same thing?
- 11 A. Sure. Indeed, in the street they often are used
- 12 synonymously.
- 13 Q. So the specific encryption information that you contend
- 14 meets element H in the device is what is called a pre-master
- 15 secret as part of SSL, correct?
- 16 A. Correct.
- 17 And you contend that this encryption information is what is
- 18 transmitted from the Nook device that satisfies the whole rest
- 19 of the claim after a transmitter coupled to the processor,
- 20 correct?
- 21 It's certainly part of that whole thing, yes.
- 22 That's what you identify as the encryption information,
- 23 correct?
- 24 Α. That's correct.
- 25 How long has SSL been around?

- 1 A. I believe that TLS 1.0 spec is since 1999. SSL came before
- 2 | that, I believe in the early to mid-90s, something like that.
- Q. In fact, the TLS specification refers to SSL version 2 as
- 4 | published in 1995, correct?
- 5 A. I believe that's correct.
- 6 Q. Is it true that the '851 patent has a 1999 filing date?
- 7 MR. CABRAL: Objection, your Honor. We are getting 8 into validity issues here.
- 9 THE COURT: I wonder about that. He can answer that 10 question.
- 11 A. In answer to that, earlier you represented that to me and I
  12 accepted that. I can certainly look at the face of the patent
- 13  $\parallel$  as well.
- 14 Q. You agree that some form of SSL is probably the most common
- 15 form of Internet encryption transport in the world?
- 16 A. It quite possibly is. I guess I couldn't say for certain,
- 17 | but it certainly is used very widely.
- 18 Q. You agree that SSL has nothing to do with ACS4 encryption
- 19 | by Adobe, correct?
- 20 A. It's independent of it, that's correct.
- 21 Q. Now, for claim H -- first, we agree that books are
- 22 encrypted and decrypted with keys, correct?
- 23 MR. CABRAL: It's not claim H.
- 24 MR. BERTA: I think I restarted the question.
- 25 THE COURT: You want to clarify that?

- 1 MR. BERTA: I do, your Honor.
- Q. I am restarting the question. We agree that books are encrypted and decrypted with keys, correct?
- 4 A. Assuming -- yeah, if you want to encrypt and decrypt them,
- 5 you would use keys to do that, that is correct.
- 6 Q. And you said that the information that meets the encryption
- 7 | information in H, which is the "transmitter coupled" stuff,
- 8 | that's the SSL information you referred to, correct?
- 9 A. Right, the pre-master secret.
- 10 Q. But in SSL, there is actually no exchange of keys between
- 11 | the Nook device and anyone else, correct?
- 12 A. Wait. So you're asking if the Nook ever exchanges keys, is
- 13 | that your question?
- 14 | Q. You just changed the question. My question is, for
- 15 purposes of SSL, there are no keys exchanged, correct?
- MR. CABRAL: Objection, your Honor. Foundation.
- 17 THE COURT: Overruled.
- 18 A. I believe that's correct. It certainly starts with the
- 19 pre-master secret, but I believe that's correct.
- 20 | Q. And that pre-master secret, you agree that's not a key,
- 21 | correct?
- 22 A. That's correct.
- 23 | Q. And for purposes of claim 96, the only thing that the Nook
- 24 | device ever transmits to anyone is this pre-master secret,
- 25 || correct?

- 1 | A. You're talking about just element H or the whole claim?
- 2  $\parallel$  Q. For purposes of claim 96, it is correct that the Nook
- 3 device never transmits anything to anyone that you have
- 4 | identified -- you know what, you're right. Fair enough. I am
- 5 | not talking about the EANs, which is the beginning of the
- 6 claim. I am only talking about the encryption.
- 7 With respect to encryption, isn't it true that the
- 8 only thing that the Nook transmits to anyone else is a
- 9 pre-master secret, correct?
- 10 MR. CABRAL: Objection to form, in terms of it's not
- 11 | clear what part of the claim he is referring to.
- 12 THE COURT: Overruled.
- 13 A. One more time, please. Sorry.
- 14 | Q. Isn't it true that with respect to ACS4 or SSL or any
- 15 encryption at all on the Nook device, the only thing that the
- 16 Nook device ever transmits to anyone is a pre-master secret for
- 17 | an SSL connection, correct?
- 18 A. I believe there might be other -- as part of that process
- 19 of beginning the TLS exchange, there might be some other
- 20 | information that is sent, but you're referring to I think the
- 21 | keys, and I believe that's a correct statement.
- 22 | Q. When you say I am referring to keys -- let me just ask you
- 23 | the question directly. You're not taking the position that the
- 24 | pre-master secret is a key, correct?
- 25 | A. No, I'm not.

- 1 | Q. Because it's not a key, correct?
- 2 A. That is correct.
- 3 | Q. So we agree that the Nook device never transmits any keys
- 4 | to anyone, correct?
- 5 | A. I believe that's correct.
- 6 Q. Now, the only time in this ingestion or delivery of the
- 7 | book to the device process that an unencrypted book is
- 8 | encrypted is during the ACS4 ingestion, correct?
- 9 A. I believe that's correct.
- 10 | Q. You agree that the Nook device does not encrypt books,
- 11 | correct?
- 12 A. That's correct.
- 13 | Q. You agree that the Nook device does not encrypt keys,
- 14 | correct?
- 15 A. I believe that's correct.
- 16 | Q. You agree that the Nook device does not transmit any
- 17 | information that any other server uses to decrypt a book,
- 18 | correct?
- 19 MR. CABRAL: Objection to the form of the question,
- 20 your Honor.
- 21 THE COURT: Overruled.
- 22 | A. Sorry. One more time.
- 23  $\parallel$  Q. You agree that the Nook device does not transmit any
- 24 | information that any other server uses to decrypt a book,
- 25 | correct?

- 1 A. To the best of my knowledge, that's correct.
- 2 Q. There was some picture of a double lock. Do you remember
- 3 | that?
- 4 | A. Yes.
- 5 Q. You have a double lock on there because -- I think you
- 6 | called it content provider, which is Akamai, correct?
- $7 \parallel A$ . Correct.
- 8 | Q. Those are the books that are stored in ACS4 encrypted form,
- 9 | correct?
- 10 A. Yes.
- 11 | Q. So isn't it correct that when the books come from Akamai to
- 12 | the device, and then the SSL process of tunnel encryption is
- 13 complete, those books are not in decrypted usable form,
- 14 | correct?
- 15 A. Sorry. Say that one more time, please.
- 16 | Q. When books are transmitted from Akamai down to the device
- 17 | through SSL, it is correct that after the SSL process is
- 18 complete, you still do not have a book that is in decrypted
- 19 | form, correct?
- 20  $\parallel$  A. That is correct.
- 21 | Q. Let's move to the selection issue.
- You agree that users of Nooks can purchase books using
- 23 | their Nooks, correct?
- 24 | A. Users can choose books for purchase and then request it to
- 25 | be purchased, yes.

- 1 Q. In order to purchase a book, you agree that the user has to
- 2 select a book to be purchased, correct, on a Nook device?
- 3 A. Not the way the word select is being used in this claim,
- 4 no.
- 5  $\parallel$  Q. Do you have a special definition for the word select as it
- 6 | is used in the claim?
- 7 A. The selection is done by the device itself. So the user
- 8 | requests a book.
- 9 | Q. That's not my question. My question to you is, isn't it
- 10 | true that in order to buy an electronic book on a Nook device,
- 11 | a user has to actually select the book that they want to buy?
- 12 | A. One has to choose the book, and so I am differentiating the
- 13 word select here because it's the Nook software that actually
- 14 | selects, for example, the EAN.
- 15 | Q. So you're saying users don't select books to purchase, as I
- 16 | take your opinion?
- 17 A. Users choose books for purchase, and then the Nook device
- 18 | selects the title.
- 19 | Q. So you have a view that the claim term "select," as used in
- 20 | claim 96, means something different than chooses?
- 21 || A. There is a step that is done by the user to select a book,
- 22 | and then there is software in the device that actually selects
- 23 | the title corresponding with what they have chosen.
- 24  $\parallel$  Q. So we agree that users select books to purchase on Nook
- 25 | devices, correct?

- 1 MR. CABRAL: Objection, your Honor. Asked and
- 2 answered.
- 3 | THE COURT: Sustained.
- 4 | Q. No purchase of books happen without user input, correct?
- 5 A. That's correct.
- 6 | Q. And you agree, as I think you were trying to say, claim 96
- 7 | is directed to the device itself, correct?
- 8 A. That's correct.
- 9 Q. And the device of claim 96 has certain required features,
- 10 | correct?
- 11 | A. That's correct.
- 12 | Q. One of the requirements is that the device in claim 96 has
- 13 | a receiver, correct?
- 14 | A. That's correct.
- 15 | Q. And it's true that claim 96 requires that the receiver do
- 16 | the selecting of a title from a list of titles, correct?
- 17 A. That's what the claim says, yes.
- 18 | Q. So if the user does the selecting instead of the receiver,
- 19 | claim 96 doesn't apply, correct?
- 20 | A. Well, the receiver works in conjunction with the processor
- 21 | and software running the device.
- 22 | Q. That's a different question. My question is, if the user
- 23 does the selecting instead of the receiver in the Nook, claim
- 24 | 96 does not apply, correct?
- 25 MR. CABRAL: Objection, your Honor. Relevance. There

1 | is no theory of indirect infringement.

2 MR. BERTA: This has nothing to do with indirect
3 infringement. It has to do with the literal meaning of the
4 claim term and it requires the device to do the selecting of
5 the title.

6 THE COURT: Now I see where you're going. Overruled.

- Q. According to you, it's correct that the receiver in the
- 8 Nook, as I think you mentioned earlier today, is basically the
- 9 | WiFi antenna, correct?
- 10 A. There is a receiver transmitter that is a WiFi chip with an
- 11 | antenna, yes.
- 12 | Q. I'm sorry. I didn't catch that.
- 13 A. There is a receiver transmitter chip and a WiFi antenna.
- 14 | Q. You agree that basically the receiver is the WiFi stuff,
- 15 | right?

- 16 A. Well, it's being commanded by the processor with software.
- 17 | Q. But the receiver is the WiFi functionality, correct?
- 18 A. The receiver itself literally, yes.
- 19 | Q. And isn't it correct that when selecting a title from a
- 20 | transmitted list of titles actually happens in the Nook, the
- 21 Nook is not even interacting with the receiver you identified,
- 22 | correct?
- 23 | A. That's correct.
- Q. You say that the Nook device selects an EAN associated with
- 25 | the electronic book, correct?

## ভিন্তেভিন্-1:15-cv-04137-JSR Document(154 পাঁ) পিটা 11/05/14 Page 105 of 154

- 1 You contend that there is a list of EANs coming to the device, correct? 2
  - Α. That's correct.

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- 4 And there is one EAN leaving the device, correct?
- 5 That's correct. Α.
- 6 From that you are inferring that the device is doing the 7 selecting of that one EAN, correct?
- A. But by way of that evidence plus by operation of the device and the user manuals that show how the device works, that 10 together, as well as evidence that goes along with this from, for example, Mr. Narain, that is how the device works.
- Q. Are you sure that Mr. Narain or anyone else has ever 12 13 testified that the device selects an EAN?
- 14 A. He talks about the EAN is used to identify a title and that 15 when a book is purchased, an EAN is transmitted for that 16 purchase.
  - Q. But you agreed that in the middle of this set of EANs coming in, single EAN going out, there is a user, and that user makes a selection, correct, of a title from a list of titles?

MR. CABRAL: Objection, your Honor: Asked and answered. To be clear, your Honor, I think we are using two different definitions of "title" in this context.

THE COURT: Come to the side bar.

(Continued on next page)

THE COURT: Now, what about the objection?

MR. BERTA: That's a little bit of a red herring, respectfully, because it doesn't matter. The issue is who does the selecting of whatever it is. As it turns out, as our witness explained the other day, when the user pushes on the button and makes a selection of the title, that is the selection of the EAN because the EAN is associated with the title already. There is no list.

MR. CABRAL: Your Honor, it is clear what the parties' positions are. We are objecting to the question using the EAN and the word "title" when in the opinion in the case the EAN is the title.

THE COURT: Why don't you rephrase the question.

MR. BERTA: Fair enough. I didn't understand.

(Continued on next page)

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1 (In open court)

2 BY MR. BERTA:

- Q. It's correct that in between a list of EANs coming in and a single EAN going out of the device, that in between those two things, one thing that definitely happens is a user pushes on,
- 6 | let's say, a picture of a book, correct?
- 7 A. It isn't always a picture. Sometimes there is immediately 8 available a button that shows you can buy it.
- 9 Q. OK. But somehow the user has taken the step of making a
  10 selection of a piece of available content that they want,
  11 correct?
- 12 A. They have chosen a book for purchase in some fashion.
- Q. What the software and the device would actually show you is that when the user is making that selection of the piece of content that they want, not only are they picking the picture or the title or the buy, they are also actually selecting an EAN from a list of EANs at that point in time on the device, is
- 17 EAN from a list of EANs at that point in time on the device, is 18 that correct?
- A. The user doesn't have knowledge of the EANs. The user has knowledge of the book. The software in the Nook has knowledge of the EANs that equate to this.
- Q. Exactly. At the time the user makes the selection of the piece of content that they want, they are actually picking, even if they don't know it, one and only one EAN to be transmitted out; the device doesn't actually have to go in and

- 1 | find the EAN out of a set of EANs, correct?
- 2 A. Well, they are choosing a book, for example, from The New
- 3 York Times best seller list, from that list, and then, when
- 4 | they have chosen a book from that list, the selection of that
- 5 book for purchase, when they have chosen that, that book for
- 6 purchase is then selected from that list by the software. So
- 7 | the software in the device is actually selecting that EAN
- 8 corresponding to the book that has been chosen by the user.
- 9 | Then that is what gets transmitted to the cloud.
- 10 | Q. But the EAN doesn't just have to be selected by the
- 11 | software; it has to be selected from a list by the software,
- 12 | isn't that correct?
- 13 A. We are talking about selecting from a list, and there are
- 14 certainly scenarios that there are lists in the Nook.
- 15 | Q. When the user picks a title of a book that they want, they
- 16 | are not only selecting that book content, they actually are the
- 17 ones picking that EAN out of a list, is that correct?
- 18 MR. CABRAL: Objection: Asked and answered.
- 19 THE COURT: Overruled.
- 20 A. They are the ones who are choosing that book, and then the
- 21 | software in the Nook selects that EAN from that list.
- 22 | Q. That's the piece where I think we disagree. I want to show
- 23 | you something. Isn't it correct that the EAN is actually
- 24 | already associated with the book the user is choosing at the
- 25 | time they make the selection, correct?

- 1 A. There are certainly EANs that are assigned for each book.
- 2 | Q. It is associated in the device, correct?
- 3 A. There's lists of these EANs in the device.
- 4 | Q. But there is not a list at the time of the selection by the
- 5 user. I want to show you Exhibit 754, which is the Nook HD+.
- 6 | OK?
- 7 A. Right.
- 8 | Q. This is on. I believe it is connected to Wi-Fi. Trust me.
- 9 A. OK.
- 10 | Q. I am going to put it down here. This is just on a Nook
- 11 | HD+, fair?
- 12 A. OK.
- 13 | Q. I'm going to go to the shop application. I press the
- 14 | button for the shop application, and it opens the shop
- 15 | application, correct?
- 16 A. Right.
- 17 | Q. We are now inside the shop application. There is content
- 18 | available, is that correct?
- 19 A. That's correct.
- 20 | Q. Let's go to a list of books. What about the Books Behind
- 21 | the Oscars? OK?
- 22 A. OK.
- 23 | Q. This is a list of books, fair?
- $24 \parallel A$ . This is a list of books.
- 25  $\parallel$  Q. I am going to select a book. I push a button inside the

- 1 | book. Now there is no more list, right, so there is no
- 2 selection from a list at this point, is that true?
- 3 A. You could have also pushed the button to purchase it at
- 4 | that previous step.
- 5 | Q. Let's put it back at the list and see what happens. Do you
- 6 know whether or not the EANs are associated with each of those
- 7 books already so that when the user is picking a book, he is
- 8 | also picking the EAN for that particular book?
- 9 A. There is a list of EANs that has been presented to the
- 10 Nook, and when you press one of these buy buttons, you are
- 11 | selecting the EAN from that list.
- 12 || Q. The user?
- 13 A. The Nook device is actually doing that as a result of the
- 14 user choosing the book.
- 15 | Q. As it turns out, what actually happens is -- I hate to use
- 16 | the word "hack," but I will. There is a manipulation of the
- 17 device that if you tone down the volume button all the way --
- 18 do you see that volume down thing? Do you see that volume
- 19 down?
- 20 | A. OK, yes.
- 21 | Q. Then you hold on the device itself, the book, it shows you
- 22 | the metadata actually already associated with that book. Do
- 23 | you see this?
- MR. CABRAL: Objection, your Honor. Can we come to
- 25 | the side bar?

1 (In open court)

- 2 | Q. Do you see this says "Item Metadata"?
- 3 | A. Yes, I do.
- 4 Q. That is in fact the information associated with that
- 5 particular book, correct?
- 6 A. It appears to be, yes.
- 7 | Q. It's small, no doubt about it. But inside that metadata --
- 8 | there's a lot of metadata. There it is. There is one, and
- 9 only one, EAN listed in this metadata, is that correct?
- 10 A. I'm sure that's true.
- 11 | Q. When the user pushes the title of the book, actually the
- 12 user is selecting the EAN as well, even if they didn't know it,
- 13 | correct?
- 14 MR. CABRAL: Objection to form, your Honor.
- 15 THE COURT: Overruled.
- 16 A. You're showing one scenario here, and you called it a hack.
- 17 | You could also go back to where you were, and if you hit the
- 18 button to purchase the book, that would have selected -- that
- 19 | would have allowed the Nook to select the EAN from that list of
- 20 | books, just like the claim element says.
- 21 | Q. You actually don't know any of this, because the only thing
- 22 | you looked at was the man-in-the-middle information, which you
- 23 | said a list of EANs came in and one went out, nothing about in
- 24 | the middle, correct?
- 25  $\parallel$  A. No. I had log files that were an extensive part of my

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Α.

Yes, I did.

How long is that report?

- 1 A. It was about 1680 pages.
- Q. You were also asked about some associates that have done
- 3 work for you. Can you explain that, please.
- 4 A. Sure. The work, as you, can guess from this expert report
- 5 | being that long, was quite extensive. It involved a lot of
- 6 analysis. It involved installing debug software on the Nook
- 7 devices to capture, for example, log files that was
- 8 | referencing, and involved a whole lot of analysis.
- 9 I enlisted some associates of mine who worked at my
- 10 direction to help me with the process, to help, for example,
- 11 | with the man-in-the- middle and help take the photographs.
- 12 | Everything was at my direction, and it was a quite extensive
- 13 process.
- 14 | Q. You were asked about your experience with ereaders as well,
- 15 do you recall that?
- 16 | A. Yes.
- 17 | Q. You were asked specifically about your work with Amazon, do
- 18 | you recall that?
- 19 | A. Yes.
- $20 \parallel Q$ . And your work with the Barnes & Noble ereader in this case,
- 21 | obviously, do you recall that?
- 22 | A. Yes, I do.
- 23 | Q. What is your understanding of the -- what are the two most
- 24 | popular ereaders on the market, if you know?
- 25 | A. Let's see. There are certainly multipurpose devices.

1 MR. BERTA: Objection: No foundation.

2 THE COURT: Sustained.

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- Q. Is there anything about the opinions or the testimony you have given here today that would require special expertise in electronic book readers?
- A. Not necessarily. I would say fairly understanding what the technology is. Any project that you get into, you need to understand some of the technology at issue. But you always bring to bear your previous experience. I have had a lot of experience with consumer electronics devices, with development of software and hardware. I have worked on teams that have integrated products, integrated hardware and software into consumer electronic devices. I have a lot of experience with that background, and that allows me to step into projects and understand them fairly quickly because of that breadth of experience.
- Q. Could you tell the jury a bit about your experience with hardware and consumer electronics specifically.
- 19 | A. Sure.
  - MR. BERTA: Asked and answered, your Honor.
  - MR. CABRAL: This was called into question during cross-examination, your Honor.
  - THE COURT: He has explained that he has substantial experience. I don't think we need to go beyond that.
- 25 | Sustained.

- 1 | Q. You were asked about a case in which you were allowed to
- 2 provide testimony on software but not hardware issues, do you
- 3 | recall that?
- 4 | A. Yes, I do.
- 5 | 0. What was that case about?
- 6 A. That case was about a hardware device that ran -- also, it
- 7 | was a basic course on software that was interfaced between two
- 8 | storage interfaces. One was called ISCSI. The other one was
- 9 | called Fibre Channel.
- 10 | Q. How long ago was your involvement with that case?
- 11 | A. That was 12 years ago.
- 12 | Q. Can you explain for the jury your understanding as to why
- 13 | your testimony was limited to software?
- 14 MR. BERTA: Objection: Asked and answered.
- THE COURT: Not really. You read him his answer from
- 16 | the deposition, but I don't know that he was asked to give here
- 17 | in court his explanation. If he was, I will allow it in any
- 18 | event.
- 19 MR. BERTA: Thank you.
- 20 MR. CABRAL: Thank you, your Honor.
- 21 A. Sure. During the deposition I was asked the question, are
- 22 | you an expert in hardware design? My answer to that question
- 23 | was no. The reason I answered that question that way is
- 24 | because --
- 25  $\parallel$  THE COURT: No, no. That is certainly going to be out

1 of the scope of the question your counsel asked you.

- MR. CABRAL: I'll ask one more question on this line, your Honor, and move on.
- Q. Why did you answer that you were not an expert in hardware design at your deposition in that case 12 years ago?
- A. That was because I hadn't actually designed hardware, printed circuit boards, and computer chips.
  - Q. As promised, I will move on. The '703 patent specifically is what I want to talk about next. You were asked some questions about the web browser. If we can bring up claim 1 of the '703 patent on the screen.
- MR. CABRAL: I apologize, your Honor. I didn't know you couldn't see the board. Apologies on my end.
  - THE COURT: That's all right. It gave me an opportunity to emote, which always adds a little flavor to an otherwise drab afternoon.
  - Q. I want to direct your attention to the last four lines of the claim beginning with "Wherein." Do you see that?
- 19 | A. Yes, I do.

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- Q. Specifically the clause, "Wherein, the consumer appliance does not require a user to access a web browser or other device in order for the consumer appliance to initiate retrieval of the data," do you see that?
- 24 | A. Yes, I do.
- 25 | Q. Does the user, in your opinion, need to access anything for

- 1 | the Nook device to initiate retrieval of the data?
- 2 | A. No.
- 3  $\parallel$  Q. Then why do you say that?
- 4 A. Because when you hit the shop button, simply that act does
- 5 | the initiation of data, in this case of retrieval of data.
- 6 Q. Regardless of the debate about whether the shop application
- $7 \parallel$  is or is not a web browser, does the outcome of that debate
- 8 | affect your opinion as to whether the Nook devices infringe
- 9 | claim 1?
- 10 A. No, it does not.
- 11 | Q. Can you explain that?
- 12  $\parallel$  A. Sure. As I said, what happens is you hit the shop button,
- 13 | that initiates the retrieval of data from the Barnes & Noble
- 14 | cloud, simply that one act. Independent what happens as a
- 15 | result of that, who cares if it's a web browser or not.
- MR. BERTA: 26, your Honor, scope.
- 17 | THE COURT: No, I think the door was opened to this.
- 18 | Overruled.
- 19 | Q. I would like to switch technologies a bit -- I'm confident
- 20 | Mr. Berk can handle this -- and put something up on the ELMO,
- 21 | if possible. You were asked about this document by Mr. Berta,
- 22 do you recall that?
- 23 | A. Yes, I do.
- 24 | Q. This is Plaintiff's Exhibit 76-B. I believe it has been
- 25 marked for identification.

1 | THE COURT: It's in evidence.

2 MR. CABRAL: I apologize, your Honor. Thank you.

- Q. This document refers to a user-agent. Do you see that? Do you recall being asked about that?
- A. Yes, I do.

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- Q. Do you know what that user-agent and the information that follows after it refers to?
  - A. Yes, I do.
  - Q. Can you explain what that is.
  - A. Sure. It's indicative of software that has been compiled into the program. The reason I say that is because a lot of programs are created by people writing code, but because they don't want to write all this code brand new, there are things that are called libraries that contain modules that are commonly used for functions, such as accessing things on the Internet.

Because that is a very common function to use, there are libraries that contain basic modules that allow access to the Internet. This line is indicative of the inclusion of that library in that software module. It has nothing to do with whether or not there is a web browser that is being used, that is being built on top of that. That is totally independent of what the issue is. It is simply access to the Internet is what that is indicative of.

MR. CABRAL: I think we can shut off this ELMO now so

- 1 | we don't have to look at the carpet. Thanks.
- 2 | Q. You were also asked about identifiers during your
- 3 | testimony, do you recall that?
- 4 | A. Yes, I do.
- 5 | Q. Do you have an opinion as to how Barnes & Noble returns
- 6 data to the Nook devices after the shop icon is selected?
- 7 | A. Yes, I do.
- 8 | Q. What is that opinion?
- 9 A. My opinion is that the Barnes & Noble cloud uses either the
- 10 device ID or the model number or both to determine the format
- 11 | of data to be returned to the device.
- 12  $\parallel$  Q. Why do you say that?
- 13 A. I say that because I have read testimony from Mr.
- 14 | Mulchandani, who has talked about the operation of the devices.
- 15 | The way that the shop application specifically works is on a
- 16 device-by-device basis. He makes reference to the context in
- 17 | which that device-by-device basis works, that is, for different
- 18 devices it works differently.
- 19 MR. BERTA: Objection, your Honor, to the extent this
- 20 | is referring to another witness's testimony who has appeared in
- 21 | this case.
- 22 | THE COURT: I understand.
- 23 MR. CABRAL: This is also 30(b)(6) testimony given in
- 24 | the case, your Honor.
- 25 | THE COURT: This has come up before. When we are

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patent in this case. Mr. Berta asked you about the lending process starting with the acceptance of a loan offer and ending with the download of the loaned book. Do you recall that?

We will move on to the lending patent, which is the '501

THE WITNESS: Yes, I am, your Honor.

THE COURT: All right.

- 1 | A. Yes, I do.
- 2 | Q. How long does that process take?
- 3  $\parallel$  A. That whole process usually takes on the order of 2 to 4
- 4 seconds. The little video that I showed actually just after
- 5 the 1 second point, that's when the book started to be down-
- 6 | loaded, and it took about 3 1/3 seconds for that particular
- 7 demonstration.
- 8 | Q. Do you recall Mr. Berta asking you about the calculation of
- 9 | the expiration date for the loan period?
- 10 | A. Yes.
- 11 | Q. When does that occur in relation to the user accepting a
- 12 | loan offer?
- 13 A. It happens after that in the cloud.
- 14 | Q. Approximately how long after that?
- 15 A. On the order of between 1 to 2 seconds.
- 16 | Q. When does the calculation of the loan period happen in
- 17 | relation to the automatic download of the electronic book?
- 18 A. It happens within about 1 or 2 seconds before the download
- 19 | begins to happen. Although, even in the demonstration I saw,
- 20 | the whole process of acceptance to begin the download was just
- 21 over a second, so that would have included the calculation in
- 22  $\parallel$  the middle of that, a period of about 1.1 seconds.
- 23 | Q. Based on your experience, is it unusual for those
- 24 | operations to be done sequentially in the operation of computer
- 25 || software?

A. By definition, computer software runs sequentially. When you write software code, which I have written a lot of over the years, it's a series of steps that are performed sequentially, one after the other. Necessarily, whatever you are doing is going to be done sometime during that process. It might be toward the beginning, the middle, the end, but it has to be a series of steps in order to accomplish some task.

THE COURT: Counsel, I thought you were not going to be this long. We are going to give the jury a 10-minute mid-afternoon break at this point, and then we will come back and go to 4:30.

You are excused for 10 minutes.

MR. CABRAL: Thank you, your Honor.

(Continued on next page)

MR. CABRAL: I believe there are objections on

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MS. CHOW: Your Honor is correct, with respect to the sales figures that Mr. Cabral is referencing, that was a confidentiality issue. The parties have agreed that the expert should be able to rely on it. But we would prefer not to have --

THE COURT: What I am asking for right now is your objection to the interrogatory.

MS. CHOW: Your Honor, our objection to the interrogatory is that it is a summary chart that does not expose the entirety of the agreements and all of the terms of the agreements. We have an objection to that. The one chart that they do want to get into evidence that is attached to our interrogatories, there are largely technology licenses that we believe are not comparable licenses under G-P factor 2.

THE COURT: Let me see the interrogatory with attachments. Let me see the exhibits. When we resume in about five minutes, I'll give you my rulings.

(Recess)

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THE COURT: With respect to the interrogatory which is Plaintiff's Exhibit 200, the objection is overruled. With respect to Joint Exhibits 24, 25, 29, and 30, if and when we reach the point where Mr. Magee needs to refer to any of the sales data there, it can go up on the jury screens and the Court screen but not the public screens, which are two. You can just deal with it by reference or by having something blown up on the screen if that is necessary.

If you don't know how to do that, which I suspect you don't, just make sure that Mr. Magee doesn't get to there before 4:30, and then you can work at 4:30 with my courtroom deputy to figure out how to do it.

Bring in the jury and let's get the witness back on the stand.

(Jury present; witness resumed)

THE COURT: Counsel.

MR. CABRAL: Thank you, your Honor.

## BY MR. CABRAL:

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- Q. Two final topics, and then we are done. You were asked about the Barnes & Noble cloud keeping track of the lending period. Do you recall that?
- 10 | A. Yes, I do.
- 11 | Q. Do you know if the device also tracks the lending period?
- 12 A. Yes, it does.
- 13 | Q. What is your basis for saying that?
- A. My basis for saying that is there was deposition testimony
  from Mr. Narain that said that the device was able to operate
  independent of the cloud and that the expiration period was
- able to be supported independent of the cloud.
- 18 | Q. The final topic of your testimony today, hopefully, is you
- 19 were asked about a conversation with Professor Stephen Magee
- 20 | and whether you spoke with him about commercially acceptable
- 21 design alternatives for claim 96 of the '851 patent. My
- 22 | question to you is, do you recall having a telephone
- 23 conversation with Professor Magee or his associates last year?
- 24  $\parallel$  A. I do recall having one. It was quite a while ago.
- 25  $\parallel$  Q. Do you recall the substance of that conversation at all?

- A. I don't recall the specific substance of that.
- 2 MR. CABRAL: No further questions, your Honor.
- 3 THE COURT: Any further cross?
- 4 MR. BERTA: Just one.

## RECROSS-EXAMINATION

6 BY MR. BERTA:

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- 7 | Q. Can we get claim 1 of the '703 up. The last element of the
- 8 | '703 claim 1 says, "wherein the consumer appliance does not
- 9 require a user to access a web browser or other device in order
- 10 | for the consumer appliance to initiate retrieval of the data."
- 11 | Do you see that?
- 12 | A. Yes, I do.
- 13 | Q. You were testifying yesterday that the shop application,
- 14 which is what the accused feature here is, is not a web
- 15 | browser, is that right?
- 16 A. That's correct.
- 17 | Q. Did you just say that it doesn't matter anymore, I just
- 18 didn't actually hear your testimony, that the shop application
- 19 | could be a web browser?
- 20 A. No.
- 21 MR. CABRAL: Objection.
- 22 | Q. That's what I heard and that was my question. You didn't
- 23 || say -- you still agree --
- 24 THE COURT: No, no. Sustained.
- MR. CABRAL: Thank you, your Honor.

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THE COURT: Remind me what the two motions were. If you can't tell me, I'm not going to sit around and hear one of your colleagues figure out what these motions are that you have been so assiduously pursuing. What are they?

MR. EDERER: They are motions with respect to Professor Magee's use of large numbers, essentially, sales numbers.

THE COURT: Yes, I remember that one. That motion is denied. What is the other motion?

In other words, they summarize each factor in their SOUTHERN DISTRICT REPORTERS, P.C.

going to go through all the G-P factors. They start out with a

list of the G-P factors, list them all, and they are very

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narrow.

Yes, sir. I teach managerial microeconomics to first-year

- 1 | MBA students. That's about how we set prices and markets, for
- 2 | example. Second, I teach global finance. And for several
- 3 | years I have taught a course in the law school at the
- 4 University of Texas on how to calculate corporate litigation
- 5 damages, which would include patent infringement damages such
- 6 as the issue here in this case.
- 7 Q. You said you have been teaching at Texas for approximately
- 8 | 38 years, correct?
- 9 | A. 38 years.
- 10 | Q. Before you taught at the University of Texas, did you have
- 11 | any other teaching positions?
- 12 A. Yes, sir, I did.
- 13 | Q. Can you tell the jury briefly about what other teaching
- 14 positions you had before you worked at the University of Texas.
- 15 A. Yes, sir. I also taught for five years at the University
- 16 of Chicago, and two years before this I taught for two years at
- 17 | the University of California at Berkeley.
- 18 | Q. Sir, can you give the jury a very brief sense of what kind
- 19 of educational training you had to work as a professor.
- 20 | A. Yes, sir. Generally, you need a Ph.D in order to be a
- 21 professor in a university, and I have a Ph.D from MIT in
- 22 | economics.
- 23 | Q. Professor Magee, aside from your teaching experience, did
- 24 | you have any other professional experience in economics outside
- 25 | of the classroom?

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- A. Yes, sir. I've done work for the U.S. government.
- 2 (Pause)

- I believe I was talking about government service.
- 4 | Q. Thank you for the reminder. I appreciate it. Professor
- 5 | Magee, you said you have done some work with the U.S.
- 6 | government, you said?
- 7 | A. Yes, sir.
- 8 | Q. What government agency are you talking about?
- 9 A. I have advised four different presidential administrations,
- 10 served on the White House staff for 7 months. I have also
- 11 | worked for the president in the president's Council of Economic
- 12 | Advisers for a year. And on two different occasions I did spot
- 13 consulting, traveling to Washington, and I did that for four
- 14 | different presidents: Presidents Johnson, Nixon, Ford, and
- 15 George Bush the first, the senior George Bush.
- 16 MR. EDERER: Objection: Relevance, your Honor.
- 17 | THE COURT: Of course that's right, but you didn't
- 18 | raise that when he asked the question. You waited until the
- 19 answer was given. You knew what was coming because of the
- 20 | hearing we had previously had. So I think the objection has
- 21 | been waived. Overruled.
- 22 Q. Professor, in addition to that experience, do you have any
- 23 | experience writing for academic journals?
- 24 | A. Yes, sir, I do. I have served on the editorial board --
- 25 MR. EDERER: Objection, your Honor.

Generally speaking, can you give the jury a small

- 1 understanding of why you are here today.
- 2 A. I've been asked to opine on damages, patent infringement
- 3 damages, in this case involving the two parties here in this
- 4 case.
- 5 | Q. Have you formed an opinion about damages related to this
- 6 case?
- 7 | A. Yes, sir.
- 8 | Q. What is your opinion about damages related to this case,
- 9 | Professor Magee?
- 10 | A. My opinion is that a reasonable royalty should be paid from
- 11 | Barnes & Noble to ADREA for 50 cents per unit, totaling about
- 12 | \$6 million in damages.
- 13 | Q. I want to ask you a little bit about the work that you have
- 14 done on this case, Professor Magee. Do you recall
- 15 | approximately how long you have been working on this case or
- 16 | when you were retained?
- 17 A. Yes, sir. It seems like it's about a year, if not a little
- 18 more than a year.
- 19 THE COURT: I need to interrupt for a second, counsel.
- 20 | Forgive me. I want to remind the jury. This was in that
- 21 preliminary instruction I gave you, but I just want to remind
- 22 you.
- 23 The first thing you are going to have to determine is
- 24 whether there has been infringement. If there no infringement,
- 25 | that's the end of that. If there is infringement, then the

- 1 | second thing you are going to have to determine is whether,
- 2 | notwithstanding the infringement, the relevant patents were
- 3 | invalid. If the patents are invalid, that's the end of that.
- 4 But if they are valid and if there has been infringement, then
- 5 you go on to determine damages.
  - This witness is talking about the third of those steps, the determination of damages, which you may reach or not reach, that will be entirely up to you.
- 9 Go ahead, counsel.
- 10 MR. COX: Thank you, your Honor.
- 11 | BY MR. COX:

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- 12 | Q. Professor Magee, in order to reach that opinion -- you said
- 13 you have been working on the case for about a year at least,
- 14 | correct?
- 15 | A. Yes, sir.
- 16 | Q. Across that year, what kind of work were you doing?
- 17 | A. We were doing a lot of research on documents provided by
- 18 both sides in the case -- independent research, online
- 19 research, academic research -- attempting to assess what would
- 20 be a proper measure of damages in the case.
- 21 | Q. When you said earlier that you had been retained in this
- 22 | matter, you are being paid for your time working on this case,
- 23 || right?
- 24 | A. Yes, sir.
- 25  $\parallel$  Q. How much are you being paid?

- 1 A. I'm being paid \$600 an hour.
- Q. Do you have an idea of approximately how much you have been
- 3 | paid to date for your time?
- 4 A. Yes, sir. I think it is in the neighborhood of 150,000 or
- 5 somewhat more. I don't know precisely.
- 6 Q. Across the year you have been working on this case, you
- 7 | said you were doing research and analysis, correct?
- 8 | A. Yes, sir.
- 9 Q. Can you give the jury a brief assessment of the types of
- 10 | information you were reviewing when you were doing this
- 11 | research.
- 12 A. Yes, sir. We were reviewing literally hundreds of court
- 13 documents, reviewing depositions, witness testimony, facts in
- 14 | the case, the allegations, and requesting documents and
- 15 | requesting and getting information outside of the case to try
- 16 | to form an opinion.
- 17 | Q. It is the opinion you mentioned a minute ago, right?
- 18 | A. Yes, sir.
- 19 | Q. In order to reach that opinion, what type of analysis are
- 20 | you doing?
- 21 | A. I'm following pretty much the standard analysis done in a
- 22 | case like this called a Georgia-Pacific analysis.
- 23 | Q. Briefly, at sort of a high level, can you describe to the
- 24 | jury what you mean by the George-Pacific analysis.
- 25 | A. Yes, sir. George-Pacific refers to a case, I don't know,

- 1 | back in the early 1970s, I believe, which outlined sort of the
- 2 definitive set of steps that frequently courts have used.
- 3 | There are many other cases, but this is one that is classic. I
- 4 | certainly used it in this case. It involves setting up what is
- 5 | called a hypothetical negotiation. It's kind of a complicated
- 6 academic term. What it means is that you have a pretend
- 7 | negotiation before the patents started being allegedly
- 8 | infringed between the parties.
- 9 Q. Professor Magee, I'm sorry to interrupt you. I want to ask
- 10 | you a question about that.
- 11 | A. OK.
- 12 | Q. When you say you set up a hypothetical negotiation or
- 13 | pretend negotiation, could you describe to the jury how you go
- 14 | about setting up that negotiation.
- 15 A. Yes, sir. The George-Pacific case gives you a very
- 16 | specific checklist of about 15 things for patents to be valued.
- 17 | They give you a way of here is the things you should consider
- 18 | and look at. But at the end it kind of comes down to the
- 19 | hypothetical negotiation. If you think the two parties got
- 20 | together and were reasonable and well informed and assumed the
- 21 patents were valid and infringed, since, as the judge said,
- 22 you've gotten to that stage, then you try to figure out what
- 23 | would be the most reasonable outcome that both parties would
- 24 | agree to.
- 25 | Q. When you are considering this type of hypothetical

negotiation and analysis, are there particular parameters that govern how that hypothetical negotiation is supposed to be framed?

MR. EDERER: Objection, your Honor: Leading, also calling for a legal instruction and conclusion at this point. He can say what he did.

THE COURT: I'm going to allow him to very briefly answer that question. It may be, undoubtedly be, the subject of a court instruction, my instructions. If there is something that he says here that the other side objects to, we will have a side bar on it at that time. I think it would be useful to have a very brief overview of the relevant factors, so go ahead.

that hypothetical negotiation analysis, are there particular parameters that you applied in setting up that analysis?

A. Yes. The parameters I apply is the following. We can look at other negotiations that were held, but we have to assume in this one that the parties are not disagreeing anymore about whether the patents are valid or infringed. They are assumed to be valid and infringed. That's an important assumption.

Q. Professor Magee, when you were talking about setting up

Second, we assume that the parties are reasonable and that they are not just grandstanding and saying I won't pay or the patent holder is saying you've got to pay me an arm and a leg. They are reasonable. They are reasonable, they know all

- 1 | the facts in the case up to the time of the hypothetical, and
- 2 | they are allowed to look past the date of the hypothetical
- 3 | negotiation to subsequent facts as well.
- 4 Q. You mentioned the date of the hypothetical negotiation.
- 5 Can you describe to the jury how you determine the date of your
- 6 | hypothetical negotiation analysis.
- 7 A. Yes, sir. That is a bit outside my control. It is a date
- 8 | that the courts generally set. It's at the date of first
- 9 | infringement. That would be the date when Barnes & Noble would
- 10 | have been in this case alleged to have first started using the
- 11 patents in the case. So it must happen right at that time.
- 12 | Q. For your analysis in this particular case, what was the
- 13 date that you used for the hypothetical negotiation analysis?
- 14 | A. Yes, sir, that would be November of 2009, late November,
- 15 November-December. I believe around November was the first
- 16 | sale of product that has been accused in the case.
- 17 | Q. You mentioned, I believe, that your analysis assumes that
- 18 | the patents at issue are valid, enforceable, and infringed?
- 19 | A. Yes, sir.
- 20  $\parallel$  Q. What is the reason that you make that assumption for your
- 21 | analysis?
- 22 A. The reason you make that is that the parties haven't been
- 23 | able to agree for some reason up until now, and frequently it's
- 24 | a disagreement by the defendant saying we don't feel like we
- 25 | are infringing.

1 MR. EDERER: Objection, your Honor: Nonresponsive.

2 THE COURT: Yes, sustained.

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- A. Sorry, counsel. Could you ask that again or some other way or something? Thank you.
- Q. Let me be clear. Professor Magee, you are not presenting an opinion one way or the other necessarily that the patents are infringed or valid, right?
- 8 A. That's correct. I don't want to mislead you to think that
  9 I'm of that opinion. That's just what I have to assume. I'm
  10 not an expert on infringement or validity.
  - Q. Now I want to ask you about your opinion. You said your opinion was 50 cents. Can you give me the basis. What was the nutshell version of your opinion regarding damages, please?
    - A. Yes. The nutshell version is I looked at the number of units that have been accused, and I determined what I felt would be the reasonable royalty rate per unit, and that rate is 50 cents per unit.
  - Q. After you determine that reasonable rate per unit, how do you come up with the damages amount?
  - A. That's fairly simple. You just multiply the 50 cents or whatever the royalty rate you determine times the number of units that are alleged to have infringed. In this case apparently the parties have agreed on that, which is somewhere under 12 million units are agreed on as the units infringed, the accused units.

- 1 | Q. Let me make sure I understand it correctly. You figure out
- 2 | a royalty rate, is that correct?
- 3 | A. Yes, sir.
- 4 | Q. Then multiply by the number of units, right?
- 5 A. Correct.
- 6 | Q. That gives you some total, correct?
- 7 | A. Yes, sir.
- 8 | Q. I will I want to dig into those numbers a little bit, OK,
- 9 or those classification of numbers. When you talk about the
- 10 units, what was the units that you used in this case?
- 11 A. The unit is just below 12 million units, which would be
- 12 | over the entire period from November 2009 through the latest
- 13 data available, which is June of 2014, June of this year.
- 14 | That's the last date available.
- 15 | Q. What type of information did you review to determine the
- 16 | appropriate number of units for your analysis?
- 17 | A. There were documents, there are documents, in the case that
- 18 provide the number of units. I examined that data that has
- 19 been provided.
- 20  $\parallel$  Q. Professor Magee, the other number that you were talking
- 21 | about I think was a rate, right?
- 22 A. Yes, sir.
- 23 | Q. Can you describe, explain to the jury briefly at a high
- 24 | level, what you mean by rate.
- 25  $\parallel$  A. A royalty rate is the number of dollars per unit that you,

- 1 | the jury, after hearing all the testimony, will have to
- 2 determine is the fair rate per unit. It's a dollar number.
- 3 | It's 50 cents in my opinion. Every time one of the infringing
- 4 units is sold, just one time, it is charged a charge of 50
- 5 cents.
- 6 MR. EDERER: Objection, your Honor: Not responsive to
- 7 | the question. The question is with respect to the units that
- 8 | have been determined in this case.
- 9 THE COURT: He was just indicating what he meant by
- 10 | the rate in the hypothetical. Overruled.
- 11 A. I'm sorry, counsel. Help me with the question again. I've
- 12 lost it.
- 13 | Q. You're fine. Professor Magee, with regard to the rate, the
- 14 | rate is just the amount per alleged infringing unit, right?
- 15 A. Yes, sir, it's the dollar amount. It's the amount that
- 16 | you --
- 17 THE COURT: You have answered the question. Put
- 18 | another question.
- 19 | Q. In this case what was the rate that you determined?
- 20  $\parallel$  A. The rate I think is the most reasonable rate would be 50
- 21 cents for every infringing unit sold.
- 22 | Q. Is it a flat 50-cent rate?
- 23 | A. Well, it's not a flat 50-cent rate. It's a 50-cent rate up
- 24 | to about 20 million units, and then there is a quantity
- 25 | discount dropping to 25 cents once you go about 20 million

1 units.

- Q. In this particular case you determined that rate by doing that hypothetical negotiation analysis, right?
- 4 A. Yes, sir. That will be the culmination of the analysis, 5 yes, sir.
- Q. When you do that analysis, who are the parties that are involved that you are assessing for your analysis?
  - A. What I understand the law requires is that the owners of the patents at the time of the first infringement, which is back in November of 2009, those two owners would be Discovery and Philips. They owned the patents at that time. Some months later they formed a joint venture and went into another joint venture, and another party now owns the patents. But at that time it is not ADREA, it's Philips and Discovery.
  - Q. The patents that you are talking about, what are the patents that you are talking about for this particular case?
  - A. Yes, sir. There are three patents that are involved. One is the '851 patent. That is sort of a security patent. The second patent is called the '501 patent, which is the lending function or the ability to lend ebooks to someone else. The third one is the '703 patent. The '703 patent has to do with functionality on the Nook eReaders that allows you to push a button and go straight on to the Barnes & Noble website and buy materials, buy things, buy books and other things.
  - Q. You mentioned that the hypothetical negotiation analysis

- 1 looks at who the patent owner was at the date of the
- 2 | hypothetical, right?
- 3 MR. EDERER: Objection: Leading.
- 4 THE COURT: Sustained.
- 5 | Q. Let me ask you a question.
- 6 A. OK.
- $7 \parallel Q$ . For the particular patents at issue in this case, which
- 8 | patents were owned by which owners for purposes of your hypo-
- 9 | thetical negotiation?
- 10 A. Thank you, counsel. I should have mentioned that earlier.
- 11 | The first two patents I mentioned, the '851 and the '501, which
- 12 | is the security patent and the Lend Me patent, those are both
- 13 owned by Discovery in 2009. The last patent, the Philips
- 14 | patent, was owned by -- the '703 is Philips' patent.
- 15 | Q. For your analysis in this case, are those the owners that
- 16 | you assumed?
- 17 | A. Yes, sir, those are the owners I assumed would be at the
- 18 | negotiating table.
- 19 | Q. Professor Magee, that is two separate owners across the
- 20 | three patents. Did you have one negotiation? How many
- 21 | hypothetical negotiations are you considering for your
- 22 | analysis?
- 23 | A. Yes, I'm considering one negotiation for all three patents.
- 24 | Q. Why are you considering one negotiation for all three
- 25 | patent in this case?

A. Those were the owners at the time. Rather than have a series of separate negotiations, in the real world as a practical matter it is useful just to have a single one. In this case I have assumed that there would be these two parties both negotiating at the same time. An important reason for that is all three patents were alleged to be infringing starting on that date.

For example, the '703 patent just issued that very month, November 2009. The other two patents had been in existence for about two years, so they were already in force. Since all three of the patents were in force as of that date, then that's sort of a reasonable economic outcome to have it all at once.

- Q. Professor Magee, once you determine the parties that are going to be involved in the hypothetical negotiation and the date of the hypothetical negotiation, generally, at a high level, can you briefly describe what specifically goes on for the hypothetical negotiation analysis.
- A. The George-Pacific case suggests that you go through this checklist of 15 different things. It's not an exhaustive list, but it attempts to get different cases to focus on the checklist, see which ones are relevant. The ultimate decision, of course, at the end, the negotiation comes down to in addition to all that checklist, what would two reasonable parties do, taking anything reasonable into consideration,

- 1 | because no checklist can cover everything.
- Q. You mentioned that checklist of factors, right, Professor
- 3 | Magee?
- 4 | A. Yes, sir.
- 5 | Q. I am not going to ask you to do it verbatim, but can you
- 6 give the jury sort of a high-level rundown of what the factors
- 7 | are that you are talking about.
- 8 A. Yes, sir. If I might, your Honor, I would give them a
- 9 preview of what you are going to hear for the next hour or two,
- 10 | which is kind of what are these factors all about.
- 11 | Factor number 1 is about what royalties have already
- 12 been paid to the patent owners for these patents. That's
- 13 | number 1.
- 14 Number 2 is what kind of payments have been made by,
- 15 | for example, in this case Barnes & Noble to other people for
- 16 | technology that Barnes & Noble has licensed.
- 17 MR. EDERER: Objection, your Honor.
- 18 | THE COURT: Hold on. You know what I think makes
- 19 sense? Ladies and gentlemen, I am going to let you go for
- 20 | today. First thing tomorrow I will give you what the so-called
- 21 George-Pacific factors are so that we don't have to have it
- 22 come from any witness. I'll just tell you what they are
- 23 | tomorrow. Then we can continue with the witness's testimony.
- In terms of tomorrow, we are going to sit from 9:00
- 25 | till 1:00. You say, yeah, yeah, Judge, how likely is it you

will be here at 9:00, we have heard this stuff before. But I want you to be optimistic. It's one of the great American attributes. I will do my best, and we will see you at 9 crook tomorrow morning.

(Jury not present)

THE COURT: Professor Magee, you may step down. We will see you at 9 o'clock tomorrow.

(Witness not present)

THE COURT: I really didn't think, based on what I had seen in the requests to charge, that there was going to be that much controversy over this. I will ask the parties to send me by email, to my law clerk, by no later than 10 o'clock tonight either, if they can agree, a joint list of the George-Pacific factors in the bare-bones way that they would recommend that the Court present it to the jury or, to the extent you can't agree, the respective positions of the parties.

I normally, frankly, save this for my final charge to the jury. But I think, given how it has played out, we ought to do it now. I don't want more than a maximum of two sentences per factor, and probably better one sentence per factor. We are not going to get into the nuances. To some extent that will be in testimony, and the rest will be in my charge. I just want a very bare-bones overview that we can read to and maybe hand out to the jury of the factors.

Because you all love each other, I will expect a joint

submission indicating as to any factor either what you have agreed is the wording I should use on that factor or you disagree, specifying in the single email the parties' respective positions. Let me have that by 10 o'clock tonight.

Anything else we need to take up now?

MR. CABRAL: Yes, your Honor, one issue.

THE COURT: Yes.

MR. CABRAL: Regarding Professor Magee's slides. We exchanged those two days ago. We were not told of any objections to those slides. We would like the opportunity to work that out with counsel so we can use them tomorrow morning.

THE COURT: I agree with you. I was surprised to see that come up for the first time just a few minutes ago. Here is what I think on that. Why don't you send me by 11 o'clock tonight, by which time I'll just be getting rolling, the copy of the slides marked up to show any objections. Try to work it out, of course, before that. Then, as to any slide where there are objections, a very brief statement of either side as to what the objections are and what the response is. I'll take a look at that.

MR. CABRAL: Your Honor, do you have any interest in seeing the slides that are not objected to, or just the objected-to slides?

THE COURT: I have no interest in seeing the slides that are not objected to.

1 MR. CABRAL: Your Honor, there is an issue that came 2 up today, as you saw during the cross of plaintiff's 3 infringement expert, regarding this issue of a model number. 4 Yet during Mr. Mulchandani's testimony we read into the record 5 some of his testimony that was actually given as a 30(b)(6) 6 witness on behalf of Barnes & Noble. 7

THE COURT: I remember.

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MR. CABRAL: We would request an instruction at this point that that testimony be read as an admission by a party opponent into the record or at least that the jury be given that instruction, your Honor. I have the deposition notice as well as the --

THE COURT: Are you talking about something other than what was presented during his testimony?

MR. CABRAL: No, your Honor, only that one snippet of testimony.

THE COURT: It is just one of those snippets?

MR. CABRAL: That's right.

THE COURT: I think if it becomes important on your summation, you should say this is undisputed. If it is a statement of a 30(b)(6) witness, I don't see how it can be disputed. But before summations begin, assuming you are going to say that, if there is any objection, I'll hear it before summations begin and rule on it then. I don't think we need to single it out with some sort of special instruction, but I do